
POLAND



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Project Report

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1. Introduction

Wood is one of the oldest and most traditional construction materials to occur in the territories of Poland. This is demonstrated in the case of Biskupin in central Poland: an early Slavonic wooden settlement, dating back to the close of the Bronze Age and the beginning of the Iron Age (750-600 B.C). It was discovered before the Second World War. It belonged to the so called Lusatian [Łużycka] culture. Both the defensive and housing structures that were unearthed during excavations were constructed solely of wood. It is noteworthy that the prewar researchers have determined two basic types of structure occurring in Biskupin: a monolithic one, called in Polish "konstrukcja zrębowa" [corner-joining, also known as blockwork] and a timber frame system, or the so called "konstrukcja sumikowo-łątkowa". Analogical construction systems were discerned at the end of the 19th century by a Norwegian scholar Lorens Dietrichson, who defined the corner-joining or in another words the blockwork system – German "Blockbau" and the timber frame system – German "Fachwerk". Both in Biskupin and in other parts of early medieval Poland blockwork constructions were used for defensive buildings because of their greater durability (despite the larger quantities of material that were demanded) , whilst more economic timber frames, which also represented more sophisticated building technique, were used for shelters – houses inside the perimeter of defense settlements.

It is quite typical that blockwork constructions were widespread in those regions where forests abounded, whereas in the territories that were less rich in wood, the framework system was much more common. Technological and typological topography is also quite adequate, which means that blockwork was commonly used in early medieval South-Eastern Poland, whereas timberwork was widespread in Northern and Western Poland.

Wooden churches were constructed at the same time as the stone ones. It is probable that already during the time of Christianization of Poland (which took place at the close of the 10th century) they constituted a majority of all Catholic churches in the state ruled by the early Piast dynasty.

A genesis of form and spatial layout is however still unclear and remains a matter of dispute. Tadeusz Dobrowolski, a renowned Polish art historian, held that " they [wooden churches] might be considered as a heritage of the past that is itself older than the Gothic one, as well as a classical example of people's conservativeness".

In connection with the more up-to-date research of Brykowski (3) and Kornecki (4) there is no doubt that wooden churches, regarding their form, functional and spatial layouts, were a projection of the structures constructed of masonry. However, they were built by local carpenters to satisfy the needs of the local community and were based on the immediately available building materials. They are also a testimony of cultural aspiration, as Kornecki has shown: "Everything that in the course of the centuries has influenced the shape and character of Polish wooden churches had its beginnings in principles which were born in western cultural circles, and was generally influenced by the necessities of liturgy". In this case, it might be said that the unique character of that kind of building results from a specific symbiosis of traditional materials and of carpentry – craftsmanship - with the rules of composition of architectural space that stemmed from the Western examples.

The addition of the wooden churches in Binarowa, Blizne, Dębno, Haczów, Lipnica Murowana and Sękowa to the World Heritage List is unquestionable evidence that the wooden churches of the Małopolska region are "a unique phenomenon in the world, one that is strongly connected both with the common European ideological values and local building tradition. They were the most valuable, elite buildings that derived their functional and spatial composition from the demands of liturgy that were accepted in Poland along with Catholicism. Until the present day they are a true enclave situated at the cultural border of the Orthodox East and Catholic West." (6)

The general typology of wooden churches in Southern Poland responds to that of their predecessors, which were constructed of stone and brick - suffice it to compare the academically proven reconstructions of churches from the Małopolska region, such as the ones in Prandocin (early 12th c.) or in Wysocice (early 13th c.), with the oldest wooden churches in Dębno (mid-15th c.) or in Haczów (end of the 14th c.). Analogies in function and architectural composition are evident.

From the point of view of typology based on the analysis of form, the lion's share of wooden churches, especially of the older ones, represent the two-part [also called bigeminal] type consisting of a formally coherent volume of the nave and presbytery and of a tower adjoining this volume. The tower was a dominant element in this composition.

The question of an architectural solution of a volume consisting of a nave and a presbytery, however, requires an elaboration. In spite of the fact that the majority of plans of churches show a certain distinction between a nave and an added presbytery (7) which most likely caused a widespread interpretation of this type as a two-part one (8), from the point of view of construction, a nave and a presbytery are indeed one volume. The nave has a sophisticated "encasement" [zaskrzynienie] (9) that is covered either by a separate roof (as in the case of Haczów) or by a prolonged surface of the main roof, which is slightly slanted at a different angle along the encasement – as is the case in Dębno, Harkłowa or Łopuszna. Functional analysis shows that we are dealing with the trigeminal composition: a large nave has a presbytery, which is often closed orthogonally from the eastern side, and in the western part there is a vestibule or a porch located at the bottom of a tower, which is very clearly connected with a concept of a "Westwerk" known from Western Romanesque architecture. That spatial incompatibility of a volume with its functional disposition is a result of an attempt at connecting a nave with a presbytery into one whole, both formal and constructional, and to endow that whole with a monumental character stressed by a homogenous structure of a roof, inspired by the form of a stonework or brickwork Gothic temple.

The oldest wooden churches that are preserved in the Małopolska region are: the church in Haczów (end of the 14th c.), in Grybów ca. 1455, burnt in 1945, Mogiła (now Cracow) mentioned in 1466 and enlarged in the 18th c., in Blizne (2nd half of the 15th c., , reconstructed in 18th and 19th c.), in Dębno Podhalańskie (2nd half of the 15th c., rebuilt in the 17th c.), in Harkłowa (2nd half of the 15th c.), and in Lipnica Murowana (end of the 15th c.). The church in Dębno Podhalańskie belongs to the most valuable examples of wooden sacral architecture. It has a nave and a presbytery covered with a unified roof. There is a tower at the western side, in skeleton (carcass) construction, with a mock starling. Typologically, the church in Haczów is very close to the aforementioned one, however it is older, with a polygonal presbytery; so is the church in Blizne, with a detached starling-tower.

During the Baroque period many wooden temples were constructed in Poland, most of them with stunningly enriched spatial forms. The church in Tomaszów Lubelski (1737-40) has an elongated, integrated nave and presbytery, aisles and a two-part western façade. In Mnichów (1767-70) there is an orthogonal cupola above the intersection of the nave and transept; such is also the case in Libiąż Wielki (1732-41). In Przytkowice, the church of 1733 has a typical central layout with a detached starling tower.

In Silesia, different types of framework (half-timber construction) were widespread. Until the present day they testify to West European influences and structural solutions, which were adapted to the local needs by vernacular workshops. The splendid, early Baroque Evangelic "churches of peace" in Jawor and Świdnica, built in half-timber construction, are among the best examples of such buildings. There are also, however, single-nave wooden churches based on medieval traditions with corner-joining [konstrukcja zrębowa] such as the church in Książ Las (1494) or in Olesno (1518).

An entirely separate and architecturally unique group of wooden buildings consists of the Orthodox and Greek Catholic [Uniate, from the Religious Union in Brześć Litewski in the year 1596] churches, both known in Polish under the name "cerkiew", that were built in the areas inhabited by these religious communities. These territories are identical with the historic southern parts of the Commonwealth of Poland and Lithuania, now in the Lubelskie and Podkarpackie voivodships and in western Ukraine.

These wooden temples, built in the circle of the Orthodox religion, are unique examples of a combination of a longitudinal plan that was widespread in Roman Catholic churches with a central layout, generally applied in the Eastern European and Byzantine culture. In Orthodox and Uniate churches in the eastern parts of the Małopolska region, in Belarus, Ukraine and in Podolia, the dominating type is a tripartite [trigeminal], axial-symmetrical composition, where a square-shaped nave is covered with a special architectural form, thus competing with the dominant tower and corresponding clearly to a cupola that usually crowns central layouts of eastern churches. The churches [cerkwie] of the region along the River San [Nadsanie] (10) provide a perfect illustration of the competing influences. Churches in Chotyń, Tyniowce and Opaka have formal culminations above their central part that are formed as globular or onion-shaped domes, while in Leżachów, Łukawiec, and Wólka Żmijowska a dominating central part, based on a square plan, is covered with a pavilion-like, broken-form roof [also known as the Polish roof]. The shape echoes the bell-towers of rather dumpy proportions that were known from wooden Roman Catholic churches.

Another very specific and strongly differentiated set of wooden structures encompasses synagogues and Jewish houses of prayer. Jews in Poland have a long and extremely rich tradition and culture. Feliks Kiryk, a renowned historian, writes that Jews were already present in the political and economic life of Poland in the times of the Piast dynasty; and they were mostly settling in cities. They constituted "a religious group, very

difficult to be assimilated by the Christians, but owing to their talents and skills, such as the expertise in financial matters, they were closely connected to the state authority, which in turn has guaranteed their security.” (11) Contrary to the wooden churches (both Catholic and Orthodox ones) that were built in the countryside, Jews located their temples mainly in towns and cities where there were proper conditions for their economic development and activities.

Unfortunately, a large number of wooden objects were transformed into masonry, for reasons of prestige. The remaining ones were deliberately destroyed by Nazis during World War II (12). Maria and Kazimierz Piechotka, architects and well-known researchers of architectural Judaica, wrote: “Wooden synagogues do not exist – they shared the tragic fate of the faithful, who were praying there; both became victims of the Holocaust” (13).

Archival sources allow for an interpretation of those structures as absolutely outstanding examples of the use of local carpentry and wood-carving traditions for the Mosaic liturgical ideals and of the assimilation of clearly discernible Oriental influences brought by the eastern cultures such as those of the Armenians and Ruthenians, and also of the assimilation of influences of the West. Large Jewish communities were settled everywhere in South-Eastern Poland. Wooden structures existed for instance in the larger towns of the Lublin, Przemyśl and Rzeszów regions – such as Zamość, Józefów, Kraśnik, Łączna, Szczepreszyn, Tarnogród, Przemyśl or Jarosław, but the majority of wooden synagogues and houses of prayer were rebuilt during the 18th c. and at the beginning of the 19th c.

The unusual richness of functional and spatial solutions using all the advantages of wooden constructions that can clearly be seen in Polish sacral architecture, stems both from the liturgical and doctrinal requirements of the various religions present in the Polish territories, and from stylistic transformations in art and architecture.

2. Subject of the research

The research zone of the current project is limited to the Southern Poland. Both in the geographical and historical senses, today's Southern Poland comprises regions of Silesia (Western part) and Małopolska (Eastern part). Silesia and Małopolska are also cultural regions, replete with monuments of sacral wooden architecture: Protestant, Catholic, Greek-Catholic, Orthodox and Jewish ones.

Characteristics of wood – the material used for construction of these structures, that is susceptible to fire and to mechanical, biological and chemical corruptions, caused inevitable destruction. Currently there are only 700 existing wooden structures of that kind. For instance, once there were 500 sacral structures in Silesia; now there are only 130 of them left.

Currently, the regions of Małopolska and Silesia are divided into 7 voivodships: Dolnośląskie, Opolskie, Śląskie, Małopolskie, Świętokrzyskie, Podkarpackie and Lubelskie.

In Małopolska voivodship there is a wooden architecture route, more than 1500 km long, with 123 Roman Catholic churches and 39 Uniate and Orthodox ones. Among them there are objects from the World Heritage List: churches in Sękowa, Binarowa, Lipnica Murowana and in Dębno Podhalańskie.

In Polish Carpathians and in the adjoining Podkarpacie [Antecarpathians] region there are 240 wooden structures; in the historic regions around the cities of Lublin and Zamość there are ca 50 of them.

Due to the latest report by the National Centre for Research and Monument Documentation [Krajowy Ośrodek Badań i Dokumentacji Zabytków], 62% of structures are in good condition but the rest requires a considerable intervention and repair. There are still some structures which are ruined.

The following table shows the general condition of wooden monuments in the aforementioned regions:

Current condition	Architectural Monuments in Poland	Wooden Monuments of Sacral Architecture
No intervention required	9 %	14 %
Required intervention: maintenance, small interventions	36 %	48 %
Required intervention: complex protection	19 %	17 %
Required intervention: general renovation	23 %	13 %
No data	13 %	8 %

Analysis of the current state of this unique and priceless heritage of wooden sacral architecture clearly shows its diverse technical, functional, formal and legal status. It is noteworthy that the governmental conservation service has, in general, completed a comprehensive scientific documentation. Registered objects have the so called evidential cards, where current data pertaining to monument preservation are collected. The majority of wooden churches in the Upper Silesia, Lower Silesia and in Małopolska is well

protected, well used and incorporated into the structure of "wooden architecture routes". In the Eastern voivodships however, the situation is more complicated.

The monuments there were and are located in the complex cultural and religious environment; tremendous migrations during and after the Second World War, and the war itself resulted largely in desolation, devastation or even in burning of those structures (14). The aforementioned susceptibility to mechanical, biological and chemical corrosion, very low fire resistance and the lack of suitable protection - are a serious hindrance in maintenance and in adequate conservation; they are also the main cause of devastation and indelible losses of historic wooden substance.

This research project has been realized in a close and indeed essential cooperation with the State Service of Monument Preservation [Państwowa Służba Ochrony Zabytków] and its voivodship departments, which have the necessary expertise and moreover are in charge of basic documentation of structures that we were interested in. That is why the first "methodological" step was to get in touch with five voivodship offices for conservation which are responsible for protection of monuments of the two great historical regions of Silesia and Małopolska (15). They were:

1. Lower Silesia Voivodship Monument Conservator [Dolnośląski Wojewódzki Konserwator Zabytków]
2. Silesian Voivodship Monument Conservator [Śląski Wojewódzki Konserwator Zabytków]
3. Małopolska Voivodship Monument Conservator [Małopolski Wojewódzki Konserwator Zabytków]
4. Podkarpackie Voivodship Monument Conservator [Podkarpacki Wojewódzki Konserwator Zabytków]
5. Lubelskie Voivodship Monument Conservator [Lubelski Wojewódzki Konserwator Zabytków].

The draft of the research project was presented to the above authorities, as well as a request to select two wooden sacral structures in their respective areas, due to strict criteria such as:

- a) a structure has to be listed
- b) its stylistic and architectural features have to be of outstanding quality in its cultural environment
- c) a structure requires immediate intervention.

A list of 10 structures (2 of them from each region) was drawn up during working meetings. Research team started to proceed according to special forms that were prepared by the project leader, thus gathering a digital database. The list is as follows:

In the Lower Silesian Voivodship

2.1. PAWŁÓW TRZEBNICKI, ROMAN CATHOLIC CHURCH

Locality: Pawłów Trzebnicki

Administrative division – voivodship: Lower Silesian, commune: Prusice

Owner: Roman-Catholic parish in Wszemirów

Original Use: sacral - Evangelic church

Present User: Roman-Catholic parish

Time of Origin: 1709, bell-tower from the beginning of the 19th c.

In medieval times in Pawłów there was a chapel which was a "filia" of a church in Trzebnica; more or less in the year 1550 the chapel was taken over by the Evangelical community and in 1554 it returned to the Catholic Church. In 1708, Protestants had received the chapel again and they built a church there that stands until today. The church was used by the two confessions, and Catholic priest came from Trzebnica. The present Baroque church was built in 1708-1709 as a Protestant church. Skeleton construction, built on a plan of a Greek cross, is crowned in its central part by a cupola with a lantern. Mansard roof covering a central part, octagonal with "lids"; over the porch a saddleback roof covered with copper plates and slate. Windows - round and elliptic. Interior is encircled by two-storey clerestories; Baroque furnishing (half of the 18th c), main altar of carved wood, painted, analogically the pulpit and organ prospectus; stone font. Outside, on the southern wall there is a Baroque sandstone epitaph of Magdalena and Sigmund Fanigten from the year 1684.

Beside the church, there is a free standing, three-storey, square, wooden bell-tower with skeleton construction dated to the beginning of the 19th c. with a pavilion-like roof [also known as a stacked roof] covered with shingle. The church was taken over by the Roman Catholics in 1945 and renovated in 1972. Near the entrance to the churchyard there is a durmast, 160 years old.



1. Church in Pawłów (Lower Silesian Voivodship) view założenia
2. Church in Pawłów (Lower Silesian Voivodship) view of the central part
3. Church in Pawłów (Lower Silesian Voivodship) interior with the view of the presbytery

2.2. POGORZELISKA, PROTESTANT CHURCH

Locality: Pogorzeliska

Administrative division – voivodship: Lower Silesian, commune: Chocianów

Owner: Roman-Catholic parish of St. Jack

Original Use: sacral - Evangelic church

Present User: Roman-Catholic parish

Time of Origin: 1656

St.Jack's church was built in half-timber construction by the Protestants. Inside there are wall paintings (balcony and ceiling) and a unique "palm" pier supporting the ceiling. Interior elements reach back to the years 1682-1688. The initiator and founder of the church was Wolf Alexander von Stosch with his wife who descended from the von Kottwitz family. Members of the von Schkopp family, owners of Parchów, were also patrons of this church. In 1718 the parish was restored and taken over by the Catholic church. Other renovation works were held in 1966 and 1983.

4. Church in Pogorzeliska (Lower Silesian Voivodship) half-timber wall of the presbytery

5. Church in Pogorzeliska (Lower Silesian Voivodship) view from the south





6. Church in Pogorzelska (Lower Silesian Voivodship), interior with the view of the choir

In the Silesian Voivodship

2.3. OSTROPA, ROMAN-CATHOLIC CHURCH

Locality: Ostropa

Administrative division – voivodship: Silesian, commune: Gliwice

Original Use: sacral - Roman –Catholic church

Present User: unused since 1926

Time of Origin: Presbytery from the 15th c., wooden nave 1640.

Typical features of wooden churches from Upper Silesia are: roof ridge of varying height above the nave and presbytery, blockwork construction made of coniferous wood, based on stone or wooden sills, eaves covering corner joints, often projecting and forming a kind of an external narthex or arcades [Polish soboty, literally Saturdays; for shelter of pilgrims arriving on Saturday for the Sunday mass]; tower with post-frame construction is separated from the blockwork itself. Ostropa was mentioned for the first time in 1286. The church, which was burnt during the Hussites wars, is also mentioned in sources from the year 1340.

The current structure (St. George's church) hails from the year 1640. In 17th c. it was partly destroyed by the Swedish army and rebuilt in 1667-68. The church is oriented. It has wooden nave of blockwork construction set on brick basis and a tower and a porch of post-frame construction. Late Gothic presbytery and sacristy built of brickwork were added in 1693. Inside the church, there is a polychrome dated to 1668 and various interior elements from the 17th and 18th Century. The church was originally covered with shingles. Today the Neo-baroque church of the Holy Spirit, built and consecrated in 1927, is the parish church of Ostropa. The old church's interior elements were partly transferred there.

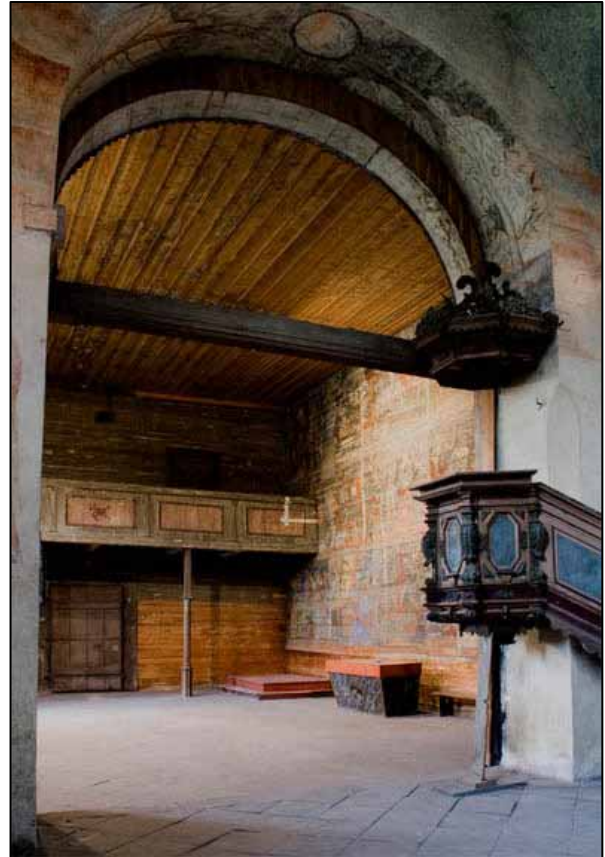


7. Church in Ostropa (Silesian Voivodship) , interior with the view of the presbytery

8. Church in Ostropa (Silesian Voivodship) interior with the view of the choir

9. Church in Ostropa (Silesian Voivodship) view from south-west

10. Church in Ostropa (Silesian Voivodship) view from north-east



2.4.RODAKI, ROMAN-CATHOLIC CHURCH

Locality: Rodaki

Administrative division – voivodship: Silesian, commune: Klucze

Original Use: sacral

Present User: Roman-Catholic church

Time of Origin: 1601, bell tower from the 18th or 19th Century

The church has one nave with a sacristy and arcades from the north. Roof is covered with shingle; has a Baroque ridge turret. Inside the old temple there are valuable pieces like: late Baroque main altar with a painting of St. Mark, which was renovated in 2001; early and late Baroque crucifixes, a sculpture of Jesus Christ Resurrected from the 17th century and a painting of Our Lady with the Child. There were also: a sculpture of St. Nicholas and a Baroque epitaph of the Reverend Krzysztof Zawalski, which now can be admired in the new church in Rodaki. The church, like a majority of wooden temples has "soboty" [see translator's note in Ostropa] - arcades supported on pillars, giving a shelter to pilgrims. The church, named the Wooden Pearl of Jura, was put on a list of wooden structures and included into the "Wooden Architecture Route" of Małopolska in 2001. The inhabitants of the village of Rodaki took great care about the church and largely owing to them it survived intact until now. March 1928 is a special date for the church; because of fire, caused by children playing around, all the wooden cottages in the village were burnt, save for the church itself; this was considered a miracle. In 2001, given the 400th anniversary of the church, the local inhabitants volunteered to order the surroundings and in 2003, within a project called "Bell Tower in the Land of White Snow", which was inspired by the Village Council, the bell tower was renovated.



11. Church in Rodaki (Małopolskie Voivodship) view of the presbytery

12. Church in Rodaki (Małopolskie Voivodship) view of the joining of the wall of the presbytery

13. Church in Rodaki (Małopolskie Voivodship), interior with the view of the presbytery

In the Małopolska Voivodship

2.5. SROMOWCE NIŻNE, ROMAN-CATHOLIC CHURCH

Locality: Sromowce Niżne

Administrative division – voivodship: Małopolskie, commune: Czorsztyn

Owner: Roman-Catholic Parish

Original Use: sacral , Roman-Catholic church

Present User: unused since the 1980

Time of Origin: 1513

The church of St. Katherine, originally consisting of one space, enlarged many times, oriented; one nave with prolonged presbytery based on a triangular plan and on the opposite side with an enlargement , which was previously a part of the porch under the tower. Rebuilt in 17th c. after repeated floods. Post-frame construction with sloping walls and a mock starling crowned by a spire. Roof with one ridge, covered with shingle, with a parallelepiped tower with an onion-shaped helmet.

Sacristy and porch were added in 1894. The interior is covered with flat ceilings. Valuable pieces of the original interior were: a Gothic triptych from the end of the 14th c. with a copy of a sculpture of St. Mary with the Child, two wings of triptych from the 15th c. and a wooden font from the 16th c. are to be found in the new church that was built nearby.

The figure in the older triptych is a copy of the 14th c. sculpture exhibited in Tarnów Diocesan Museum. Inside the old church there are still paintings of St. Anthony of Padua (18th c.), St. Katherine of Alexandria (18th c.), and a Baroque pulpit.



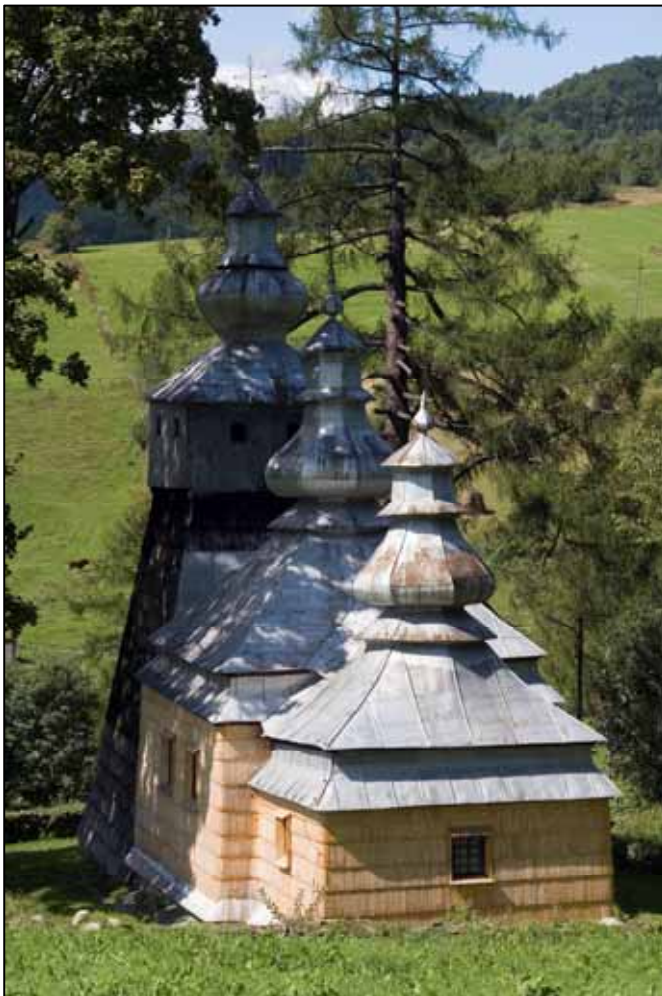
14. Church in Sromowce (Małopolskie Voivodship) view from the west

15. Church in Sromowce (Małopolskie Voivodship) wooden ridge turret

2.6. DUBNE, GREEK-CATHOLIC CHURCH

Locality: Dubne, previous name Dubna /1794/
Administrative division – voivodship: Małopolskie, commune: Muszyna
Owner: Roman-Catholic parish of Muszyna
Original Use: sacral , Greek-Catholic (Uniate) church
Present User: Roman-Catholic parish
Time of Origin: 1863

Dubne is a village located close to the Polish border, on the other side of the river Poprad there is a Slovak village named Obruche. The name of Dubne comes from the local mountain stream; it was located in the year 1603 by Michał Leluchowski on the Vallachian law, with a privilege and permission granted by Bishop Maciejowski. The area was traditionally inhabited by the Lemkos [Łemkowie; ethnic group of Vallachian-Ruthenian origin]; following the atrocities of the Second World War, in the years 1945 -1947 they were deported to the Soviet Union or to the North-Western territories granted by the Allies to the postwar Poland in exchange for the loss of the Eastern parts. The Lemkos left a heritage of wooden Greek – Catholic churches. The church in Dubne was founded and endowed by Bishop Andrzej Trzebnicki in the year 1673. The original church was burnt and was replaced in the year 1863 by a wooden structure based on a central plan, in blockwork construction with a post-frame tower. Tripartite composition [also known as trigeminal], one nave with a saddleback roof, shingles under sheet metal roofing. Three onion-shaped turrets with blind lanterns. There is an original interior from 19th century, preserved intact: Neo-Classicist altar of the 19th c. and Rococo-Classicist iconostas with icons of the 19th c., as well as small altar with a painting of St. Archangel Michael.



- 16.** Greek-Catholic Church in Dubne, (Małopolskie Voivodship) view from the east
17. Greek-Catholic Church in Dubne, (Małopolskie Voivodship) onion-shaped turrets
18. Greek-Catholic Church in Dubne, (Małopolskie Voivodship) interior with iconostas

In the Podkarpackie Voivodship

2.7. MIĘKISZ STARY, GREEK-CATHOLIC CHURCH

Locality: Miekisz Stary

Administrative division – voivodship: Podkarpackie, commune: Laszki

Owner: Roman-Catholic parish of Miękiż Stary

Original Use: sacral , Greek-Catholic (Uniate) church

Present User: unused

Time of Origin: 17th c., 1885, 1893, 1916.

The Greek-Catholic church of the Protection of the Purest Mother of God [cerkiew Pokrowy Przczystej Bogarodzicy] is situated in the centre of the village of Miękiż Stary, on a hill, south from the road Laszki - Tuchola.

The sanctuary is oriented; the structure is surrounded by the old trees. Right by the eastern wall of the church there are two sandstone tombs and slightly further there is a large tomb with a Christ's figure. Until 1976 on the axis of the church, from the eastern side, there was a detached bell-tower in a post-frame construction.

The church itself is wooden, trigeminal, built in a blockwork construction. The structure is not homogenous; the oldest part consists of the walls of the sanctuary in corner-joining construction; in the end of the 18th c. the nave and the women's porch [babiniec] were added (according to T. Spiss, this took place in 1801; other sources, such as *Szematyzmy...* report the year 1811). Most likely in the year 1885 new vaults and roofs were constructed above the sanctuary, nave and women's porch, new sacristy and most likely a proper porch was added, as were wall paintings. It is however not excluded that the present vaults of the sanctuary, nave and women's porch existed since the first enlargement. This seems to be confirmed by the exchange of shingle for a sheet metal roofing in the year 1893 (as the date in the ridge turret has it). In 1916 the church was renovated after damages caused by the war. The choir was enlarged, the roof was renovated and the external planking was exchanged.



19, 20, 21, 22, 23.
Miękiż Stary, state in the year 2006

2.8. BABICE, GREEK-CATHOLIC CHURCH

Locality: Babice

Administrative division – voivodship: Podkarpackie, commune: Krzywca

Owner: Commune of Krzywca

Original Use: sacral , Greek-Catholic (Uniate) church

Present User: unused

Time of Origin: 1840, 1888

The village of Babice existed as early as in 1389, in 1407 it became a town. The Greek-Catholic church of the Dormation of the Mother of God [cerkiew Zaśnięcia MB] church was built in 1840. Until the time of deportation of the local inhabitants of Ukrainian origin, it was a branch of a parish in Skopów. The church was renovated in 1888 and the works during that period were focused on the exchange of the roof covering from shingle to iron sheets.

The church is oriented, located in the south-western part of the village, on a hill sloping steeply towards the left bank of the river San. It is surrounded by the old lime and chestnut trees. There is a bell-tower from the western side (slightly off the axis towards the south) and farm buildings from the north. Local road from the west.

The wooden church has one space, with sacristy from the north (both in blockwork construction) and porch from the west (skeleton construction). Corner-joints with covered tenons. The sill of the sacristy is tenoned from the north to the main volume. Wooden posts (columns) inside the main space create a spatial division, thus producing pseudo-aisles of 150 cm width. Western porch in skeleton construction. The main volume (nave-cum-presbytery) has a three-sided form on the eastern side; roof frame consists of posts and rafters.

In the middle of the ridge the octagonal pseudo-lantern in skeleton construction is integrated into the roof frame. The roof frame above the sacristy is of the rafter type.

Inside, along the western wall – there is a choir, supported by two pillars in the front part and by two in the western one, with a balustrade of planks, accessible through the staircase along the western wall. Sanctuary is separated from the main space by a curtain wall of wooden planks. Walls are boarded on the outside (planked with laths). Beams are protected by a narrow eaves-like roof supported on posts , covered with shingle. There is a hipped roof of five surfaces with one ridge, half-hipped from the west, covered with iron sheets. Saddleback roof over the porch is covered with shingle.



24. Greek-Catholic Church in Babiniec (Podkarpackie Voivodship) view from południa



25. Greek-Catholic Church in Babiniec (Podkarpackie Voivodship) interior with the view of the iconostas and presbytery

26. Greek-Catholic Church in Babiniec (Podkarpackie Voivodship) bell-tower



In the Lubelskie Voivodship

2.9. BUDYNIN, GREEK-CATHOLIC CHURCH

Locality: Budynin

Administrative division: voivodship: Lubelskie, commune: Ujhówek

Original Use: sacral, Greek-Catholic Church

Present user: Roman-Catholic Church

Time of Origin: 1887, wooden bell-tower 1888

The former Greek-Catholic church of the Immaculate Conception of Our Lady [cerkiew Niepokalanego Poczęcia NMP] in Budynin was built in 1887 according to the traditional rules of construction of the ancient Orthodox churches, thus following the wooden church which existed there since 1774. The church was then transformed into an Orthodox one. The structure is oriented, wooden, built in blockwork construction with corners joined in a fishtail manner [zwęglowana na rybi ogon] on a brickwork sill. It has a classic trigeminal form, presbytery is closed triangularly; it has wider nave and a narrower women's porch which width equals that of a presbytery. There are two sacristies by the presbytery - from the northern and southern side. Every part is covered with octagonal cupolas with lanterns supported by octagonal high drums. Inside there are octagonal fake vaults and ceilings in sacristies. Outside a projecting eave supported on beams of the blockwork construction; walls above are planked. From the northern side there is a balcony supported by four beams and supported by two wooden piers framing the entrance. In the entrance itself are wooden planked doors, the date of construction of the church in the sopraporta. Cupolas, pent roofs covering sacristy and other roofs are covered with metal sheets. Inside wall paintings in the Baroque tradition (1892) with illusionist architectural motives and figures.



27. Greek-Catholic Church in Budynin (Lubelskie Voivodship) view during the preservation works

28. Greek-Catholic Church in Budynin (Lubelskie Voivodship) interior with the dome

29. Greek-Catholic Church in Budynin (Lubelskie Voivodship) interior with the view of the iconostas and presbytery



2.10. ŁOSINIEC, GREEK-CATHOLIC CHURCH

Locality: Łosiniec

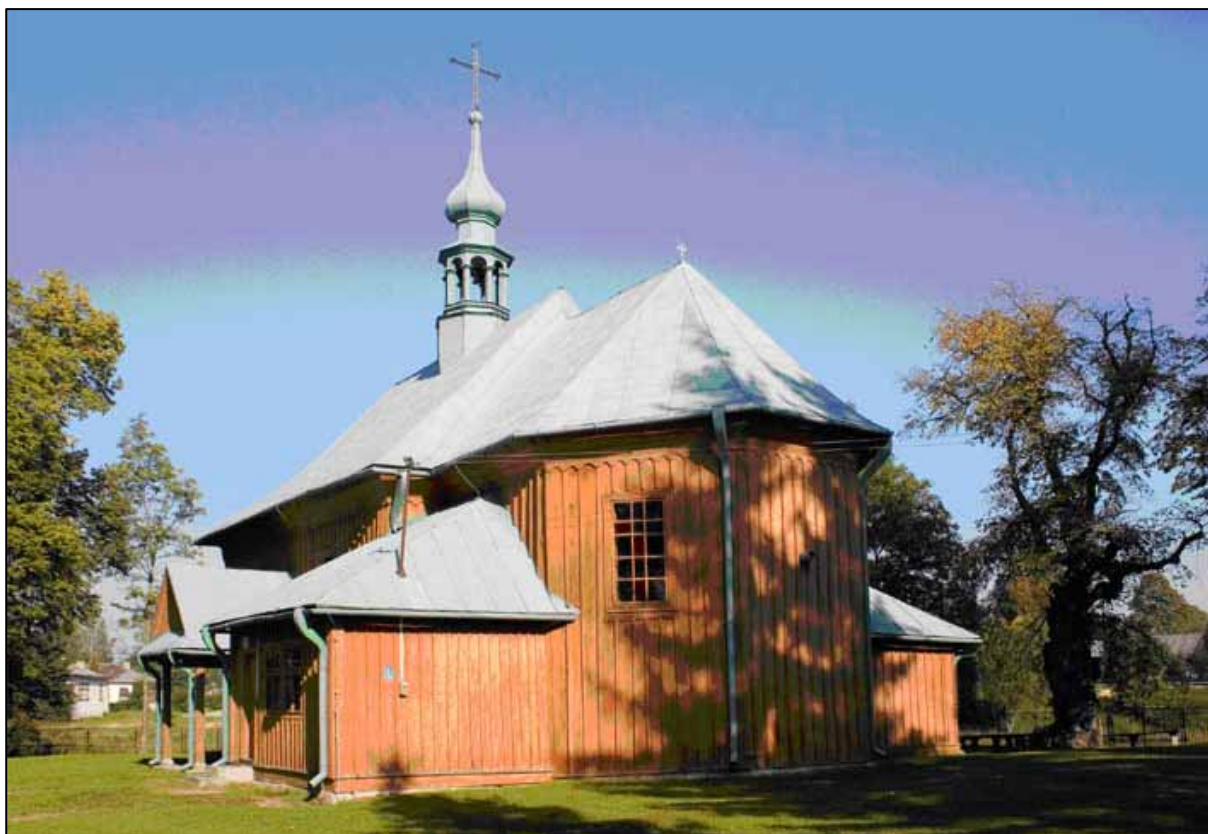
Administrative division: voivodship: Lubelskie, commune: Susiec

Original Use: sacral, Greek-Catholic (Uniate) Church

Present user: Roman-Catholic Church

Time of Origin: 1731 or 1692, wooden bell-tower 1st half of the 19th c.

The church of Protection of St. Joseph and St. Michael the Archangel [cerkiew Opieki św. Józefa i św. Michała Archanioła] was built during the existence of the Uniate parish and was funded by the magnate Zamoyski family. In 1875 it was transformed to an Orthodox one. In 1919, it was reconciliated (consecrated by the Jesuits; the vocation of St. Joseph was added to the original St. Michael one). In 1935 there was a change of a tower from a Byzantine - like to the one existing until the present day. Next to a church in Horodło, this is the only one Eastern church in the Lubelskie voivodship without a copula. It has a two-part plan, with a small vestibule; it is oriented, built in blockwork construction, with external planking with laths and arch moulding, on a brickwork, partly cemented basis. Nave is rectangular, narrower presbytery is closed triangularly, from the north and south there are two sacristies. On the western side there is a vestibule with a small porch supported on four columns; two smaller porches based on two posts each are at the entrances from the southern and the northern side. Inside flat ceilings, before 1974 finished with plywood. Choir supported on two wooden columns with profiled parapet beams. Entrance and window apertures are square, western entrance with a cable moulding. Saddleback roof covered with sheet metal, over presbytery a lower hipped roof with three surfaces, as is the case of sacristies. Below the eaves of porches, cornices with motives of cable moulding and geisipodes. The late Baroque main altar (18th c) with sculptures of the Apostles St. Peter and Paul and two angels in the portico; there also an icon of St. Mary with the Child, probably from the 1st half of the 18th c.; painted font from 1919. Bell-tower probably from the 1st half of 18th c, in post-frame construction, with planking, laths and arched moulding. The analysis of the data gathered in this survey shows clearly that the most endangered structure is the church in Mięsz Stary, which remains under the jurisdiction of the Podkarpackie Voivodship Monument Conservator [Podkarpacki Wojewódzki Konserwator Zabytków]. The initial investigation showed that the structure is also quite a specific and unique one – in the light of its architectural, constructional and artistic values. That is why the very structure was selected for the further stage of the research.



30. Greek-Catholic Church in Łosiniec (Lubelskie Voivodship) view from the east



31. Greek-Catholic Church in Łosiniec (Lubelskie Voivodship) bell-tower

32. Greek-Catholic Church in Łosiniec (Lubelskie Voivodship) interior with the view of the presbytery

3. Methodology

The research team decided to proceed according to the methodology that consists of full historical, artistic and architectural research of the status quo, and also of construction research that helps to diagnose the church's state and the degree of destruction. The project aims at finding proper solutions for technical renovation, regulation of function and of the legal status. In discussion with the national monument conservation service it became clear that it is advantageous to propose a complete architectural, structural and environmental project of restoration of the church in Mięksisz Stary, along with the cost evaluation. This will be the basis to receive a building permit and a permission from the Conservator. Having obtained the above permits, the local authorities will be able to apply for financing which is necessary to save the unique building.

3.1.

The preliminary visit on site was held in June 2006 and it confirmed the endangered condition of the former Greek-Catholic church in Mięksisz Stary. The structure remains unprotected from the access of the third parties and the devastated interior is highly endangered by the climate conditions.

It was confirmed that the church has no furnishings and details of the interior apart from fragments of a demolished staircase that led to the choir. Only ca 40% remained of the surface of the original wooden floor. On the walls of presbytery and choir and at the drum of the cupola there are traces of the two-phase wall painting. Outside, parts of the walls up to the height of ca 100 cm are completely destroyed. Higher, planking is also in a bad condition. Metal sheets on the roof are corroded and perforated.

The visit on site was conducted together with Mr Mariusz Czuba, the Voivodship Conservator and his employees and with the head of the local authorities – the commune of Laszki. Following the visit, the first official paper was drawn up by the office of the Conservator, delineating the conservation guidelines for saving the desolate former church. Future uses and potential solutions were discussed.

Within that preliminary stage of the survey, the full photographic documentation (digital) was realized; also the interactive visualization of the church was designed and executed. Its meaning goes beyond a mere documentation, as due to its panoramic construction, the visualization allows for a constant verification of the research. (See appendices). The panoramic pictures were taken on the 3rd of July 2006. The following equipment was used:

Nikon D50 camera with Nikkor AF DX Fisheye; the field of vision = 180 degrees. 6 horizontal photographs were taken, one picture of the ceiling and one picture of the floor. The long exposure time was necessary due to the poor lighting in the interior. F8 aperture (blend) was chosen, the exposure time of 30 sec. Outside the exposure time was ca 1/500 sec., with the F8 blend. With the use of necessary overlaps the spherical panorama (360°x180°) was thus created. The Hugin application was used for the making of the interactive visualization. In the process there was a need to set characteristic points such as for instance an eye of an apostle or a hole in a plank and to position them on one common overlap. The optimization of the photos and equalization of several hundred of points led to reduction of distortion and of chromatic aberration of lenses; the final result is a panoramic view where the proportion of sides is 2:1. After optimization and calculations the panoramic view is sized 4000x2000 px, saved as a .jpg file (each view has ca 1.5 MB), which allows for professional prints. For presentation the state-of-the-art professional equipment was used: panorama viewer SPi-V. Within that method of documentation an experiment was held – an attempt at fitting the iconostas (from archival photos) into the new panorama. To this end, the common points of the historic black-and-white picture and of the current colour panorama were found.

The SPi-V viewer allows to the work on layers; thus a special key was designed to switch on and off the iconostas visualization. The viewer also allows for an unobstructed flow of panoramas; a navigation follows the click on the left button of the mouse. One can also zoom in by pressing the SHIFT and zoom out by pressing CTRL. To exit from the interactive visit to the church in Mięksisz one has to press ESC.

3.2.

The parallel research of written sources and iconography took place, as well as a investigation of historical sources in the State Museum of the Łańcut Castle. The demounted iconostas was transferred there as were the furnishings and other elements of the interior. They were evacuated from the desolate church itself in the years 1964-66, and were precisely described in protocols of the Museum archives. Full description was done currently by J. Gienza M.Sc., with a catalogue containing the historical photographic documentation (see attachment).

3.3.

The next phase of the research was the completion of the survey and documentation. Because of methodological reasons two complementing technologies were applied: 1) computer drawings of architectural and structural drawings: plans, sections and elevations done in 2D (Autocad) and 2) measuring of the volume by means of a 3D laser and orthophotographic pictures of characteristic sections.

The 2D architectural survey was made by a group of students of the Faculty of Architecture, Cracow University of Technology, under guidance of licensed architects – members of the Faculty – and was verified by the project leaders (see attachment).

It consists of 16 drawings:

01 - Situation	scale 1:500
02 – Plan of the level 1	scale 1:50
03 – Plan of the level 2	scale 1:50
04 – Plan of the level 3	scale 1:50
05 – Plan of the roof frame	scale 1:50
06 – Plan of the roof	scale 1:50
07 - Elevation - western	scale 1:50
08 - Elevation - eastern	scale 1:50
09 - Elevation - northern	scale 1:50
10 - Elevation - southern	scale 1:50
11 - Section through presbytery	scale 1:50
12 - Section longitudinal	scale 1:50
13 - Section through nave (presbytery view)	scale 1:50
14 - Section through nave (choir view)	scale 1:50
15 - Section through choir	scale 1:50
16 - Section through women's porch	scale 1:50

The 3D measurements and survey were taken by the team of the National Centre for Research and Documentation of Monuments [Krajowy Ośrodek Badań i Dokumentacji Zabytków] in Warsaw, who accepted the invitation to participate in this project. Systems of digital photogrametry and 3D laser scanning were applied (see appendix).

The scans of the structure were realized in order to verify the conventional 2D survey and on their basis a spatial model was constructed. This model is not only a precise structural and architectural documentation but also it serves the correction of photogrametric works.

Laser scanner Cyrax 2500 was used along with the Cyclone software. Cyrax operates on the basis of exact remote sensing, non-reflection measurement of distance and deviation of the laser beam. The accuracy of the survey is +- 3 mm. In case of the recommended distances within the range of 1,5 – 50 m and the laser spot of 6 mm the accuracy is ca 4 mm and 12". The spatial model, constructed of hundreds of thousands of points is analyzed and reworked in the CAD – CloudWorks application. In this environment the sections and linear drawings are done.

Photogrametric works were done on the basis of a series of photographs. Two digital cameras were used: Canon 20D and Nikon D10. Series of angular pictures of each wall were taken. In order to ensure that the process of calibration (that is to define and eliminate the constant distortion of camera's optics) is successful, each picture was taken on a defined focal axis. Pictures were used as a point of departure to generate orthophotoplans of each wall, utilizing software such as Photomodeler 5 Pro and WiseImage. The coordinates were constantly checked at the 3D laser scans. The last stage in production of the orthophotoplan was the export of graphics files to the external editing software (Adobe Photoshop CS) and equalization of colours and tones.

3.4

The structural report is the integral part of the comprehensive survey. It was executed by the team led by Prof. Jerzy Jasiołko. Next to the diagnose and evaluation of the status quo the report contains the guidelines for the design of conservation of the church as well as adequate detailed technical and technological structural solutions (see attachment).

3.5

A licensed geodetic engineer was commissioned to complete the site plan along with nivelation as well as excerpts from the official property records. These materials are indispensable for the design of conservation and restoration of the church.

4. Description

4.1 General information

GREEK-CATHOLIC CHURCH IN MIĘKISZ STARY

Locality: Miękiś Stary

Administrative division – voivodship: Podkarpackie, commune: Laszki

Owner: Roman-Catholic parish of Miękiś Stary

Original Use: sacral, Greek-Catholic (Uniate) church

Present User: the building is unused; remains desolate

Time of Origin: 17th c., 1885, 1893, 1916.

4.1.1 Technical data:

Volume: ca 935 m³

Usable surface: ca. 147 m²
ca. 74 m² choir and attics

Total ca. 221 m²

4.2 Historical and architectural description (by J. Gieźa)

4.2.1 Situation

The Greek-Catholic church of the Protection of the Purest Mother of God [Pokrowy Przczystej Bogarodzicy] is situated in the centre of the village of Miękiś Stary, on a hill, south from the road Laszki - Tuchola. The sanctuary is oriented; the structure is surrounded by the old trees. Right by the eastern wall of the church there are two sandstone tombs and slightly further there is a large tomb with a Christ's figure. Until 1976 on the axis of the church, from the eastern side, there was a detached bell-tower in a post-frame construction.

4.2.2 History

In the charming Chronicle of the Village, kept by Jan Mikutra of Miękiś, one reads the following: „ In the times of serfdom, and that was in the year 1605, master Mikołaj Miękicki came to our lands with his slaves. One part of them were Ukrainian and the other part were Polish. They were 30 people. He gave them land, as much as was necessary and from this land they had to work in serfdom. From one hectare of land they had to work on his lands for one day [a week]. In exchange a peasant would not pay the property tax and the cattle tax. After some time he brought 20 slaves more so that there were 50 houses. And he also gave them land so that they could support themselves. 10 years later they built a Greek-Catholic church, because there were more Ukrainians. The church was wooden, covered with shingle and two porches and one bell-tower with three bells. In 1901 it was renovated and covered with metal. Poles would go to the church in Laszki, in the times of the Reverend Dean Ludwik Bikowski, who was the first vicar in Laszki from 1890 to 1910. He was a very good priest. He bought in Miękiś 0,2 ar [0,02 ha] of land from Wojciech Pięła for the Church Brotherhood and a house in Duńkowiczki for the nursery. Children learnt

there and there was also a little shop. There was no one in the village who could give three *morgi* [ca 1,8 ha] of land to maintain the nuns so the nuns walked for 10 years from Miękisz Nowy to teach our children. They taught three grades and religion. It was from 1899 until 1910. I, Jan Mikutra went to this school. I learned to read and write ". The above text is not only a description of historic events but also an evidence of the persisting local historical tradition, first oral and then written.

As to the church itself, in the vicinity there are the tombs of two families: Zajączkowski and Yunga. The Greek-Catholic church has many stylistic strata and was rebuilt many times. The oldest (17th c., probably) part is the blockwork construction of the sanctuary, to which in 1811 (?) the nave and women's porch were added. Most likely then the elliptical, Neo-baroque vault of the nave was also added, with a new roof frame crowned by a lantern. Also illusionist wall paintings, images of Evangelists on the drum and Angels playing music on the balustrade of the choir were added. In 1883 shingles were replaced by sheet metal covering (date on the ridge turret). Sacristy and porches enriched the volume. In 1885 wall paintings were completed (images of the figures of the Good Shepherd – Conscience and the Return of the Prodigal Son – Father I Have Sinned at the walls of the women's porch; Angels announcing the Judgment Day - at the ceiling.) The founding inscription, now incomplete, in Ukrainian language had it: "This church was built in 1880 under the protectorate of Jan Czyrnieński, due to the efforts of Jan Furczynna and Wasyl Halas, and it was painted in 1885" – and referred actually to the renovation works. The church was also renovated after the damages of the World War I. According to the local tradition the works were done by a Jew of Radymno. In the years 1872-1947 the church was a branch of a parish in Miękisz Nowy. Since the time of deportation of the ethnic Ukrainians the temple remains unused. The bell-tower in post-frame construction was completely destroyed in 1976. In the year 1989 the provisional protection measures for the church were taken, however the physical existence of the monument is still endangered.

4.2.3 Structural description

Wooden trigeminal Greek-Catholic church in blockwork construction. Rectangular nave 760x840 cm with the axial sanctuary from the east, triangularly closed, 765x555 cm, and the rectangular women's porch from the west 360x550 cm. Rectangular sacristy adjoining the nave from the north, 345x315 cm. Two rectangular porches adjoining the women's porch [babiniec] - 220x150 cm from the north along the nave and 285x345cm from the west.

The immediate corner-joining connection of the sanctuary with the nave is lacking (beams embedded in columns). Sacristy in blockwork construction added from the north in the same manner. Two porches in post construction were adjoining the women's porch [babiniec] from the north and west. Wooden sill, profile 24~25x31-35 cm (w in sacristy and porches 20,5-22 x 21-25 cm), corner-joined. Beams (logs) of the walls of coniferous wood, 14-15 cm thick, 12 cm in sacristy. Slender beams [brusy] in the sanctuary walls with tenons; in the nave and women's porch – with dovetails. Sills of the three principal spaces of the church were supported on large stones. Later a brickwork base was added. Northern wall of the nave and drum stiffened by two anchors tightened with iron bolts. Parallel solution on the south. Walls of porches made of planks joined to sills and collar beams.

Nave crowned by octagonal drum with planking in the corners; elliptical cupola constructed of boards, nailed to arches mounted to the roof frame, with octagonal lantern of four windows. Anchors at the base of the cupola. Sanctuary closed by the barrel vault made of planks, nailed to arches mounted to the floor beams. In the women's porch flat ceiling built of boards nailed to internal floor beams. In sacristy flat ceiling nailed to external floor beams. No ceilings in porches. Roof frame above the nave is not wholly identifiable. Conical shape of the roof, hipped with eight surfaces, lantern with the onion-shaped ridge turret. Roofs above sacristy (one-ridged, hipped, with 5 surfaces) and women's porch (saddleback) in rafter construction with span-pieces. Saddleback roofs over sacristy and western porch, over northern one – pent roofs. All roofs covered with iron sheets. Date "1863" painted on the ridge turret. Turret crowned by a large wrought iron cross. Smaller ones on the gables.

Walls sided with vertical planking with overlaps and laths. In the women's porch a musical choir supported on two beams; front one supported on four columns (one missing). In the western and northern wall traces of stair construction. Balustrade made of vertical planks mounted to the lower beam and the parapet beam. Openings between main spaces slightly slanted in upper corners. Upper part of the opening between nave and sacristy partly screened by planking. Floor of wooden planks pegged directly to the joists laid immediately on sand. Level in sanctuary 14 cm higher than in the nave. Northern entrance to the nave, rectangular, blinded, 200x105cm. Western entrance to the women's porch, 208x126cm, doors of planks. Wrought iron staple. Northern entrance to women's porch, 190x102cm, plank doors, wrought iron hinges and a massive iron lock. Two windows 118x80cm in the south wall of the nave, one in the north one, with frames 19 cm. Two windows in the south wall of the sanctuary, one from the north, 104x85cm, frames 16 cm. Similar windows in the women's porch (north and south) and two windows cut in the western wall, 70x50. Windows in the drum 70x45cm, frames 15 cm. Wrought iron grates.

4.3 Technical state:

State of preservation:

- destruction of the foundation and sill -ca. 70%
- destruction of the blockwork wall construction - ca.30%
- destruction of external planking - ok. 50%
- destruction of floors- ca. 50%
- destruction of windows - 100%

- disrepair of wall paintings - ca. 40%
- destruction of roof structure - ca 20%
- ceilings attacked by insects
- leaking roof covering

5. Conclusions

The architectural monument in question might still be saved, however under condition of the immediate intervention. Such an intervention shall consist of the following steps:

- Protecting of the now accessible interior from trespassers
- Supplementing of the missing covering of structural elements that are now exposed to climate
- Taking of administrative decisions to define the formal and legal status of the building
- Elaboration of a complete documentation (architectural conservation design) that allows for obtaining of a building permit as well as a permission from the state conservation service and preparation of an application for financial means to implement the project
- Promotion and public support

6. General guidelines and perspectives

Complex documentation and complex renovation works preserving all the historical strata shall be the basis for the vision of the future use of the building. Moreover the following shall be taken into consideration:

- Full conservation of wall paintings as well as taking samples in order to search for possible older strata in the area of the sanctuary
- Reconstruction of the 17th c bell-tower based on the iconography (picture taken in 1964 showing the bare post-frame construction with the measuring scale) and on analogous structures , or transfer of a bell-tower from elsewhere
- In case of taking over of the building by a permanent user – for religious purposes or as a branch of a museum – the retrieval of the original furnishing and elements of the interior (entire or parts thereof). These are currently kept in the Department of the Eastern Church Art (former Voivodship Store of Historic Commodities) in the Museum of the Łańcut Castle. Conservation of tombs of the Yunga and Zajączkowski family.

7. Guidelines for conservation

7.1 Conservation – urban design guidelines

The Greek-Catholic Church in Miękisz Stary is oriented and situated on a small hill of a triangular shape, at the crossroads; roads lead to Lubaczów, Jarosław and Przemyśl.

From the west the upper edge of the hill rises ca 2 m above the road nivelation, and the height diminishes to ca 1 m from the east. Edges of the hill are natural borders of the prospective zone of strict protection that will surround the building itself, old trees and monuments and tombstones that occupy the south-eastern part of the hill. A fence of rather low segments of stonework and wood (not exceeding 1 m in height) is proposed. It will consist of repetitive modular elements – small piers of the local stone laid in rustic manner and of horizontal wooden beams of small profiles [brusy] , covered by shingle. The project proposes recultivation of greenery along with the lawn, correction of brims and ordering of the church cemetery. Stairs and paths leading to the entrances (laid with flat stones) as well as external illumination will be built.

7.2. Conservation – architectural guidelines

Finding of an adequate function, ensuring proper conditions of use, maintenance and management remains the basic problem in case of this historic structure.

7.2.1 Guidelines for conversion of the former church

Members of the former Greek-Catholic community of Miękisz Stary have left their homeland – as a consequence of the last World War - and the current inhabitants, who belong to the Roman-Catholic parish, have built a new church. Therefore, given the preliminary discussions with the local authorities (Office of the Commune in Laszki) as well as with the Voivodship Monument Conservator, the project foresees the foundation of a local Commune Centre of Education and Culture [Gminne Centrum Edukacji i Kultury]. The immediate vicinity of the newly built school, centre of education itself, enhances this prospect.

Therefore the building might be used as a multi-purpose hall (nave) with the exhibition devoted to its history in the annex (women's porch). After the restitution of the iconostas it could moreover function as a museum of the Eastern church art (presbytery), which would be adequately protected and could also serve as a small conference hall for ca 20 persons and as an ecumenical chapel. The volume of the nave allows for placement of ca 50 seats as well as a small podium in front of the iconostas. Automatic screens for multimedia presentations and necessary services shall be concealed in the floor.

7.2.2 Guidelines for protection

- Ordering of the immediate surroundings of the church (as described in 7.1.)
- Strengthening of the structure (as in 7.3.)
- Conservation of wall paintings, following the research of painted surfaces conducted in order to delineate the technological programme of conservation
- Reconstruction of the floor, taking into consideration all the functional and technological needs (as in 7.2.1.)
- Restitution of the typical shingle covering and external planking as well as exchange of the copper covering of the ridge turret and rain gutters, drain pipes; new drainage (as in 7.3.5.)
- Reconstruction of the main and side porches with their furnishings and architectural details
- Reconstruction and restoration of windows and doors with their framing and ironwork
- Reconstruction of the iconostas currently stored in the collection of the Department of the Eastern Church Art in the Museum of the Łańcut Castle

7.3. Guidelines and proposed solutions for the conservation of the structure

The structural research of foundations, walls built in blockwork construction, floors, cupola above the transept and roof frame was conducted, featuring the defining of the structure's deformation, sinking of the foundations, state (density) of the wooden structural elements and the level of their biological and technical corrosion. The following solutions were proposed:

7.3.1. Foundations

New concrete foundation under the porches was designed (in the underground part), located at the depth of 120 cm, because of the local freezing conditions. The brickwork pediment above the ground remains, however its surface shall be conserved by means of mineral putties and lime mortars. The whole pediment will undergo hydrophobisation. The above solutions are based on the technology supplied by REMMERS. Around the church a new strip drainage will be introduced, with PVC drains and six basins in the technology supplied by REHAU. Moreover, around the church a strip of granite cobbles (11x11 cm) was designed, 80 cm wide, laid on dry sand and cement bed, with basalt gravel joints. Slope 2 %.

7.3.2. Walls in blockwork construction

The structural elements of walls in blockwork construction shall be retained as far as possible because of the wall paintings on their inner surfaces. Technical state of the sills however demands that they shall be completely exchanged – for sills of oak wood C30. Insulation of tar paper on the brickwork pediment under the sills. The research has shown that the wood of six lower beams is in a bad condition and that they can not be used as continuous beams; exchange of corroded fragments proves to be indispensable. The beams shall be removed from the structure and their parts shall be exchanged for elements of new pinewood with the use of the cast iron rings GEKA (D80) and steel bolts $\varnothing 18\text{mm}$ (3.) with the overlap. In case of the wall painting existing on the beams that need to be exchanged, the painted parts shall be cut away (ca 3 cm deep) from the beam and conserved by impregnation with the compound on the basis of epoxy resins, then glued anew. Destructed corner joints shall be exchanged. Lower beams in blockwork construction shall be reintroduced after conservation, with the traditional use of pegs in the longitudinal direction; the lowest (first) beam will be joined with the sill by wooden blocks. Temporary structure was designed to support the perimeter walls and transept during the exchange of beams.

7.3.3. Roof structure, covering

Shingle covering is to be reconstructed. Beech wood shingles, cut [łupane], 8 mm thick, 12cm wide, 30 cm long on laths 5 x 6 cm. Membrane foil laid underneath. Conservation of structural elements of the roof frame (posts, rafters, span-pieces, laths, floor beams etc.) is to be conducted through supplementing with the new fragments of pinewood C30, with joints by GEKA rings and bolts. Strengthening of structural joints against planar deformations will follow through the exchange of certain pegs for oak wood headed pegs and through supplementing the sections of fractured or loosened joints by means of fragments of the recycled wood. The exchange of the perimeter ring of the cupola (which remains under tensile stress) over the crossing of the transept and the nave was designed. Due to individual design solutions of joints the demounting of the cupola is not necessary. Pinewood C30 was used.

7.3.4. Floor and wall planking

The demounting of the existing floor was advised, as was the conservation and later mounting of the original elements. The missing boards will be supplemented by new boards. The floor was designed as the traditional „white” floor of the broad larch wood boards impregnated by the colourless preparate Fobosem 2M, waxed with natural wax on both sides, in SPEKVA or REMMERS technology. Joists shall be conserved by supplementing and impregnation with preparates such as FOBOS 2M and SADOLIN. Joists are to be laid on brick

piers positioned on the foundations in order to maintain the existing floor level. The existing sand bed was preserved. Ventilation openings \varnothing 60mm are foreseen in the brick pediment for the air exchange in the space below the floor. The existing external planking shall be demounted, corroded elements are to be removed and replaced by new pinewood planks; the uncorroded ones are to be conserved as above and mounted anew along with the new pinewood.

Final Remarks

- The research has shown that the existing deformation does not pose a danger to the statics of the structure. Therefore the designers chose not to eliminate this deformation during the conservation process. Stiffening of the structure will be achieved by partial exchange of certain elements of the structure and above all through the repair and strengthening of joints.
- After the conservation, the entire wood of the church shall be impregnated by a tri-functional prepate OCEAN 441-Z (against biological corrosion and fire), and later it shall be treated with colouring impregnates on a water basis and waxing in REMMERS technology.

7.3.5. Services

Following services were designed:

- Lightning protection installation
- Drainage
- Internal electrical installation (including heating)
- External and internal illumination
- Security monitoring and smoke detection
- Fire protection, based on FOG, the original Polish method of „water fog“.

Notes:

1. L. Dietrichson „De Norske stavkirker”, Krystiania 1890
2. T. Dobrowolski „Najstarsze drewniane kościoły śląskie jako znaki zamierzonej przeszłości”, Zaranie Śląskie, Katowice 1946, p. 17
3. R. Brykowski *Drewniana architektura kościelna w Małopolsce XV wieku*, Wydawnictwo Ossolineum, Wrocław 1981
4. M. Kornecki *Kościół drewniane w Małopolsce*, Wydawnictwo ODZ w Warszawie, Kraków 1999
5. M. Kornecki, op. cit., p. 31
6. R. Marcinek, Z. Myczkowski „Wśród cudów świata”, *Wiadomości Konserwatorskie* nr 13/2003, Warszawa 2003
7. R. Brykowski, *Drewniana architektura kościelna w Małopolsce XV wieku*, PAN, Wrocław 1981
8. R. Brykowski, op. cit. p. 111;
9. R. Brykowski, op. cit.
10. M. Skowroński *Cerkwie Nadsania. Przemysł – Leżajsk*, Wydawnictwo Fundacja s.c. Nowy Sącz 2005;
11. F. Kiryk, F. Lesniak „Skupiska żydowskie w miastach małopolskich do końca XVI wieku” w: *Żydzi w Małopolsce*, Przemysł 1991, str.15
12. Exhibition catalogue „Zniszczone – Ocalone Dziedzictwo”, by Fundacja Dobro Kultury i Stowarzyszenie Konserwatorów Zabytków, 2005 .
13. M. K. Piechotkowie *Bramy Nieba- Gates of Heaven* , Wydawnictwo Arkady, Warszawa 1999
14. M. Skowroński, op. cit.: from 119 structures that existed in 1944 only 70 persisted until the present day (8 in ruin).

Sources of illustrations:

- Photographic documentation, PP PKZ Warszawa, 1964-1968;
- Archives of the Department of the Eastern Church Art in the Museum at the Łańcut Castle. *Dokumentacja wizytacyjna z lat 1960-2000, T. I-IV. Dział Sztuki Cerkiewnej Muzeum Zamku w Łańcut*;
- Archiwum SOZ w Przemysłu, *Evidential card of the Church in Piątkowa*, oprac. J. Giemza
- *„Miejscowości Gminy Laszki na przestrzeni wieków”* Grzegorza Kubala
- J. Mazur, „Drewniane cerkwie Złotego Wieku”, in: *Monument, studia i materiały Krajowego Ośrodka Badań i Dokumentacji Zabytków*, no. 2 / 2005, Warszawa 2005, p. 71
- T. Śledzikowski, „Małopolskie kościoły drewniane na Liście Światowego Dziedzictwa Kulturalnego i Naturalnego UNESCO” in: *Monument, studia i materiały Krajowego Ośrodka Badań i Dokumentacji Zabytków*, 2 /2005, Warszawa 2005, p. 143

8. Bibliography

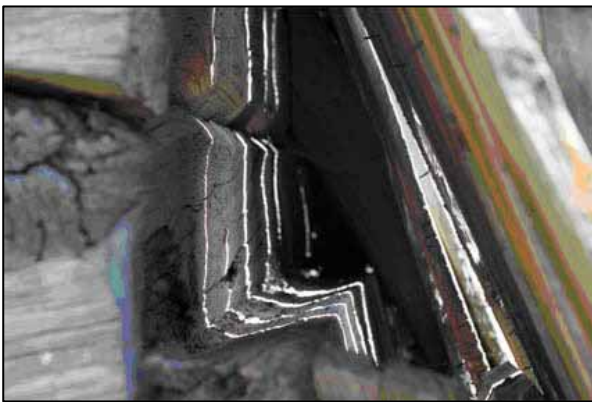
- *Szematyzmy duchowieństwa grecko-katolickiego z lat 1877, 1879, 1927, 1936, 1938-39;*
- *Losy cerkwi w Polsce po 1944 roku*, Rzeszów 1997;
- Blazejowskyj D., *Historical sematism of the eparchy Peremysl including the Apostolic Administration of Lemkivscyna (1828-1939)*, Lviv-Kamenyar 1995;
- Iwanusiw O., *Cerkwa w rujini. Church in ruins*, Toronto 1987
- Kołbuk W., *Kościół wschodnie w Rzeczypospolitej około 1772 roku*, Lublin 1998 (see detailed informations on sources and literature);
- Saładiak A., *Pamiętki i zabytki kultury ukraińskiej w Polsce*, Warszawa 1993;

Translated from Polish by Marta A. Urbańska, Phd. Arch.

**The Church of Miękiśz Stary:
Photographic Documentation**

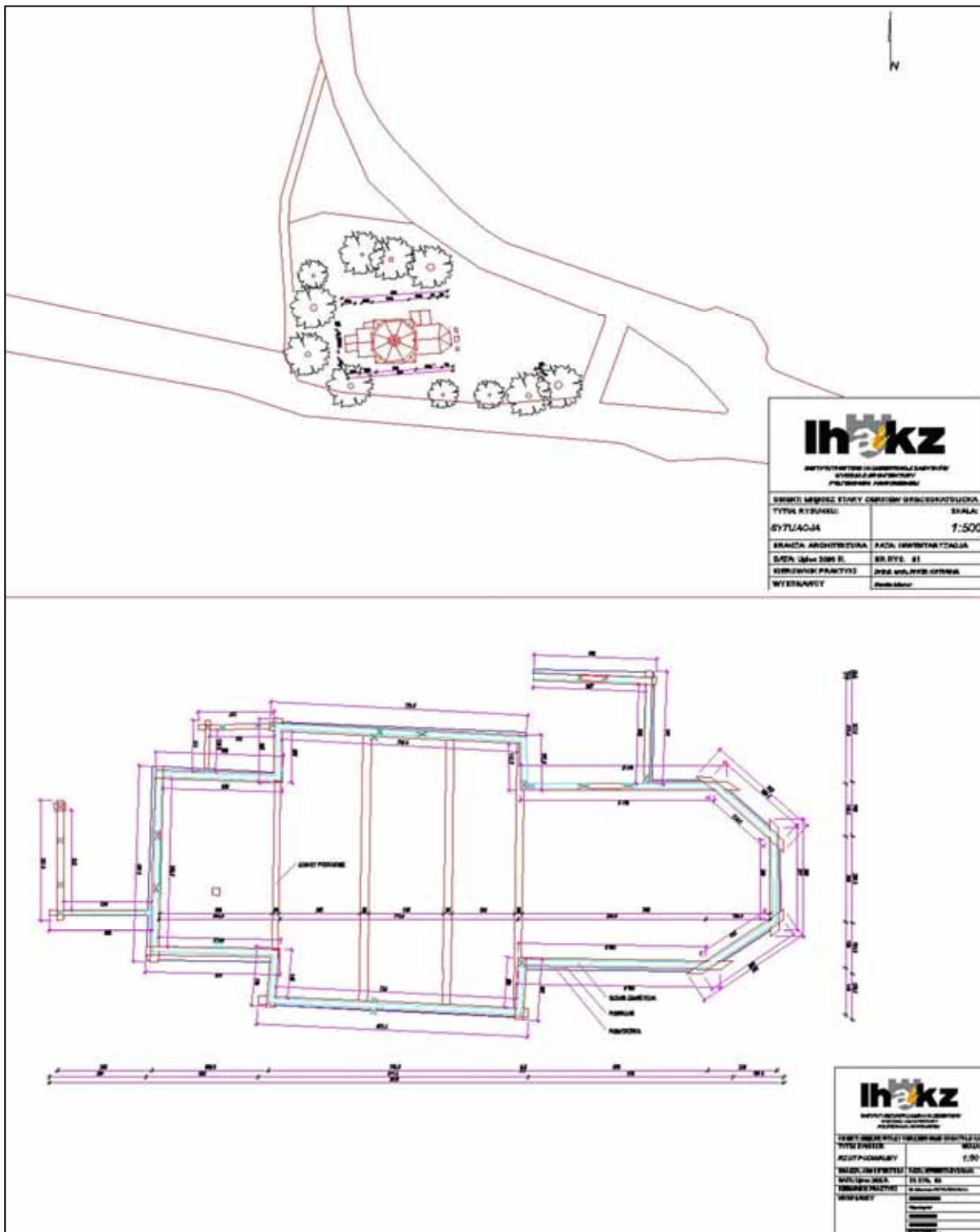


Rescuing the Hidden European Wooden Churches Heritage

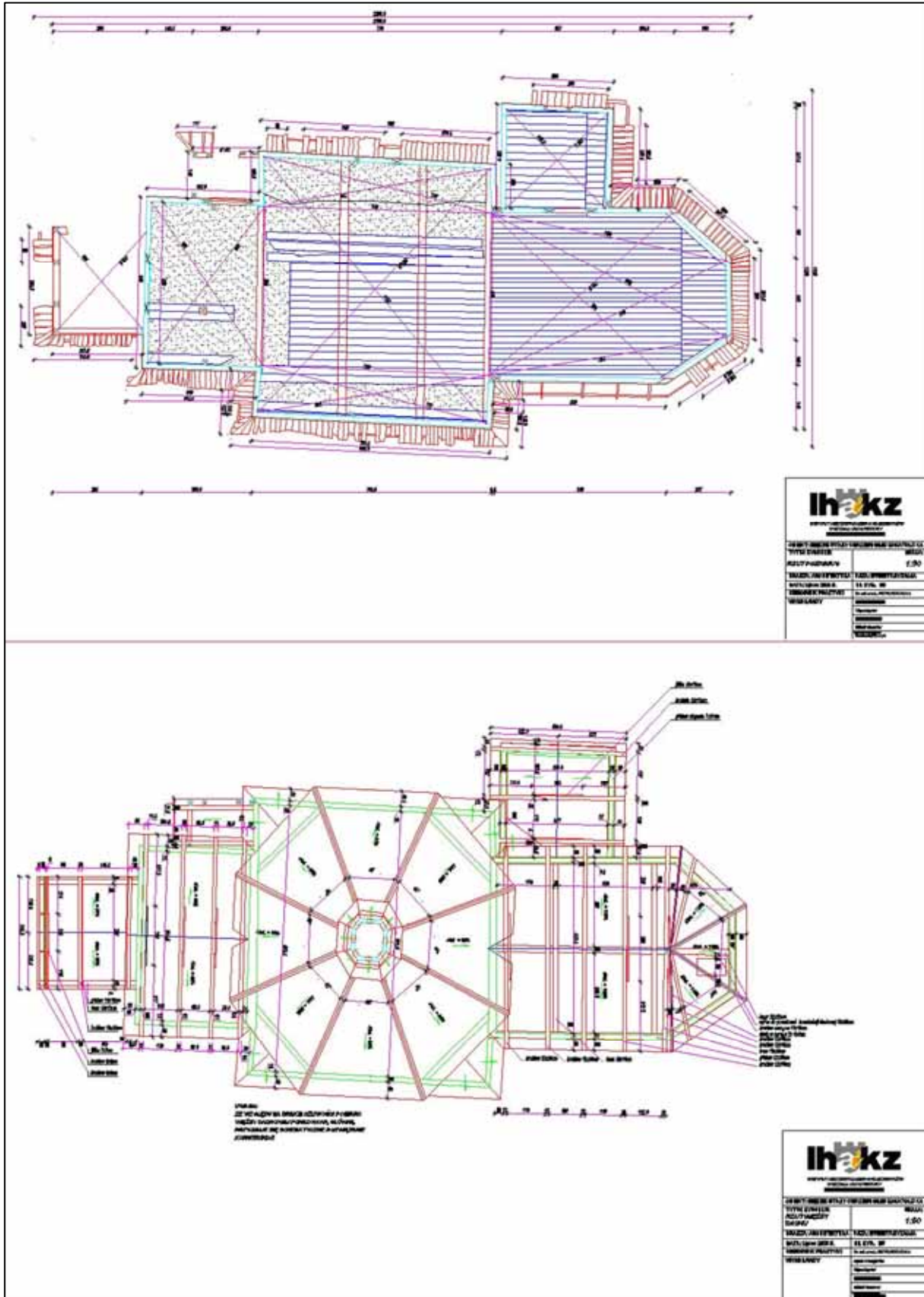


The Church of Miękiśz Stary: Drawings

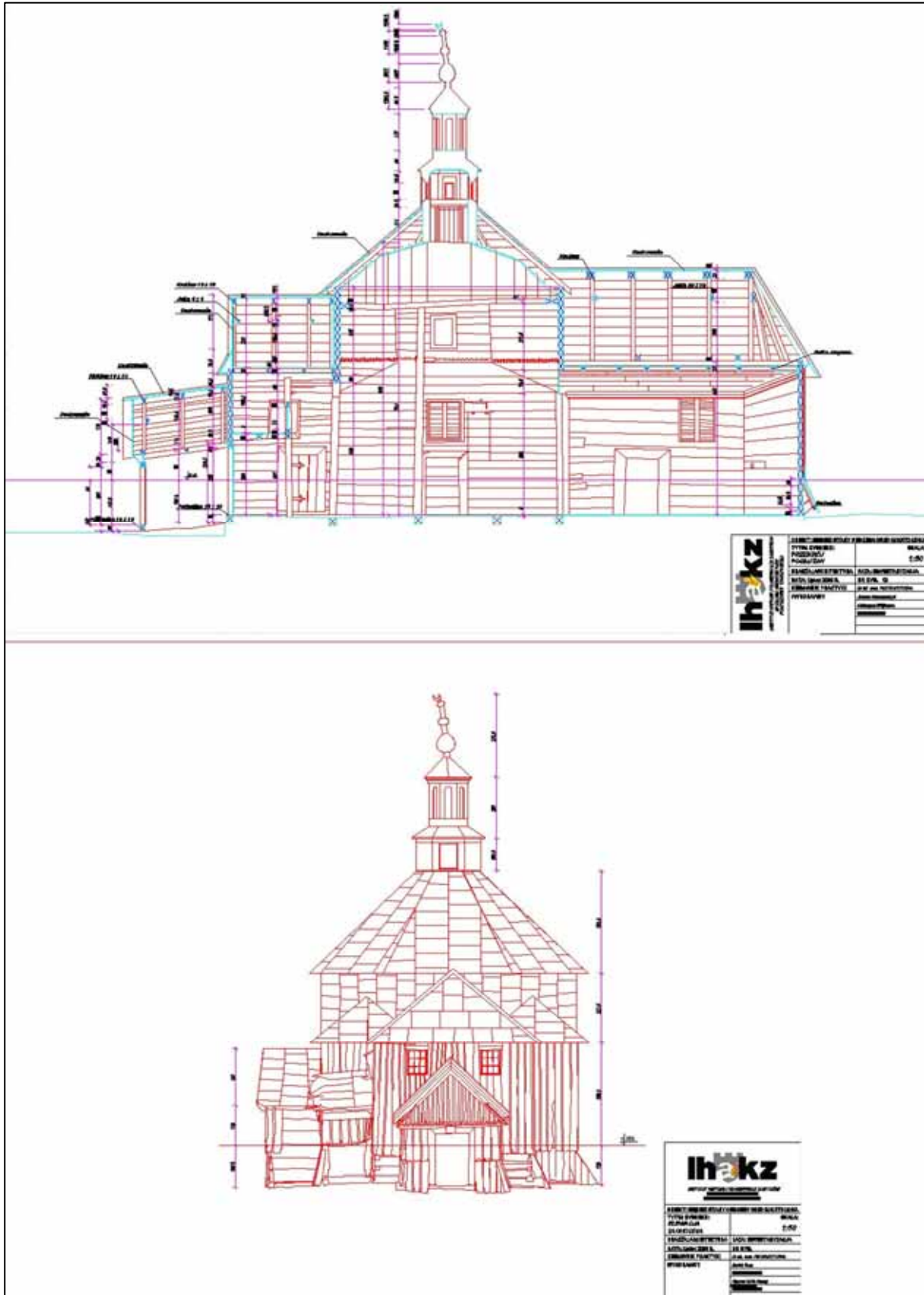
1. Site plan 2. Plan of the basement



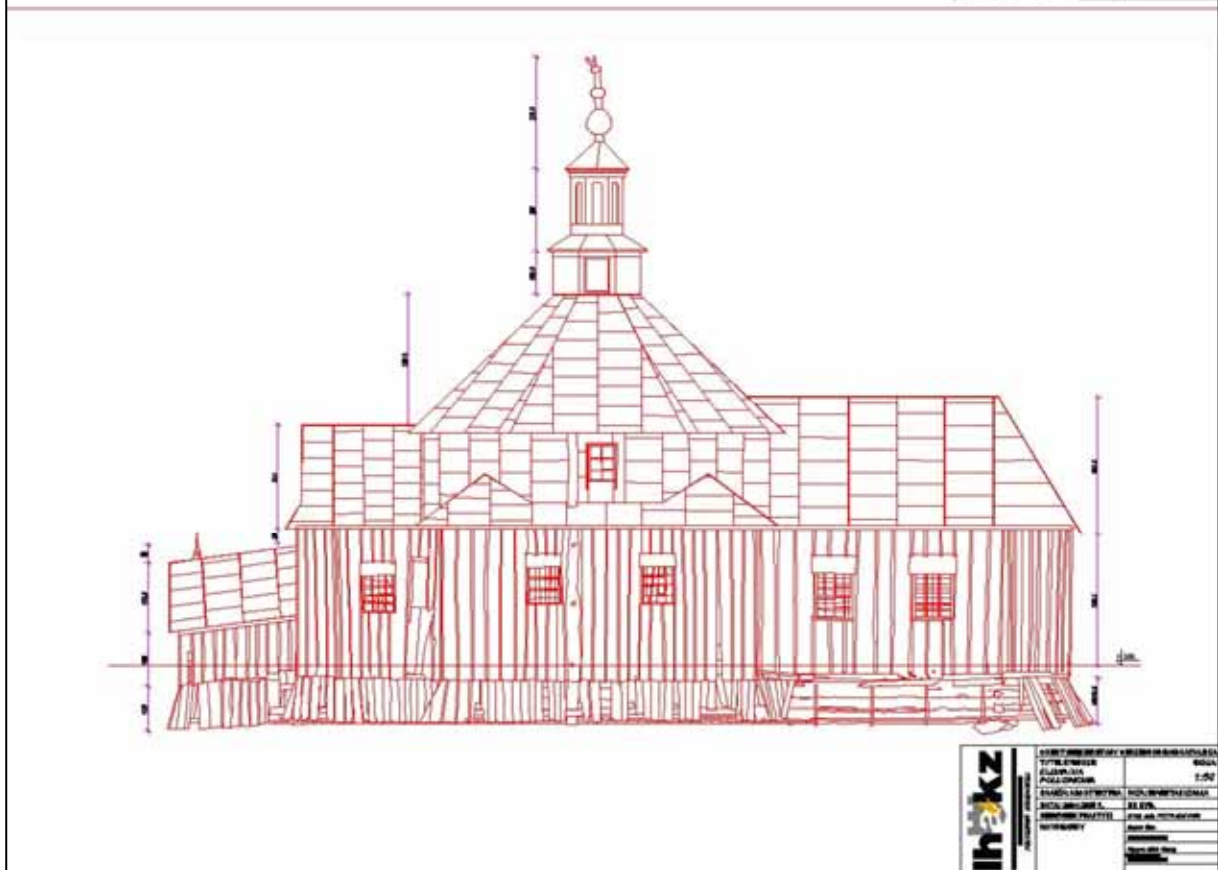
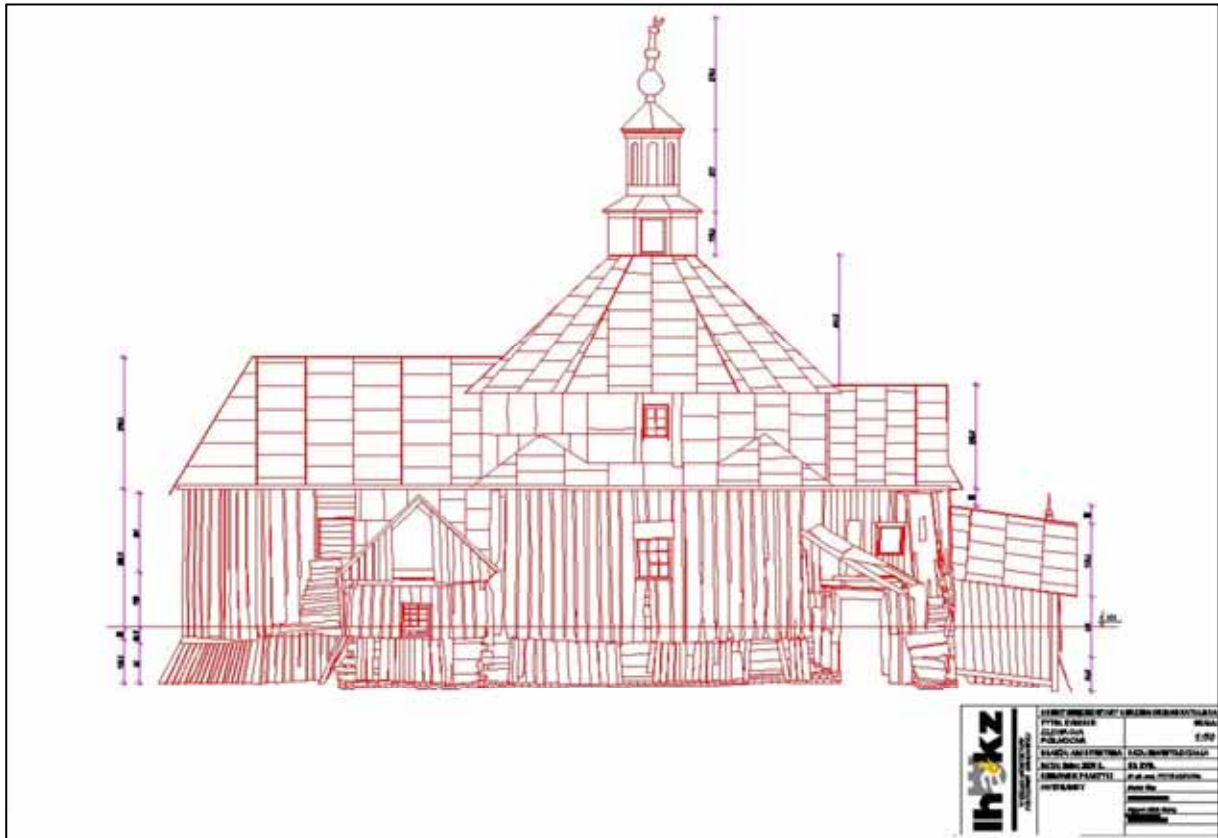
- 3. Floor plan
- 4. Plan of the roof frame



- 5. Longitudinal section
- 6. Front elevation (west)



- 7. Side elevation (north)
- 8. Side elevation (south)



POLAND

Faculty of Architecture, Cracow University of Technology

CURRICULUM VITAE

Andrzej Kadłuczka

Born in 1943 in Cracow, diploma and internship at the Faculty of Architecture of the Cracow University of Technology in 1966; teaching experience at the Chair of the History of Polish Architecture. Doctorate and Associate Professor [adiunkt] at the Institute of History of Architecture and Monument Preservation, Faculty of Architecture, CUT; Doctor of Science degree in 1983, Professor in 1995, since 2000 Full Professor [Professor Ordinus] at the Cracow University of Technology.

1986 – 1993 Deputy Dean, 1993 – 1999 Dean of the Faculty, currently director of the Institute of History of Architecture and Monument Preservation. In 1983 scholarship at the Department of Antiquities in Cairo; later lectures in architectural schools in Munster, Venice, Delft, Budapest and Zagreb. Author of over a 100 publications, papers, manuals, books and essays, conceived and organized the International Conference on Conservation which resulted in the acclaimed „Cracow Charter 2000“.

Author and co-author of numerous designs and realized projects in conservation, among others: complex of the Armenian burgher houses and Arsenal in Zamość, church of St. Salvator in Cracow, reconstruction of the monument of the battle at Grunwald in Cracow, modernization and restoration of the Słowacki Theatre in Cracow. In 1989 he founded his own architectural studio, known since in 1994 as ARCHECON, which realized numerous large scale design projects as well as built projects, such as: Music Academy in Cracow; conversion of the former King's Palace at Łobzów for the Faculty of Architecture; modernization of the Old Theatre [Teatr Stary] in Cracow; Sheraton Hotel and housing estate for the CPN corporation in Cracow; restoration of the Carmelite Church and King's Kazimierz Castle in Przemyśl; numerous commercial and residential projects as well as – recently – prestigious commissions such as modernization of the Main Market Square, revalorization of the Church of St. Adalbert, modernization and restoration of the Cloth Hall – all in Cracow.

Member of numerous scientific organizations, both foreign and national:

Polish Academy of Sciences PAN O/Kraków (1985, also member of Presidium of the Committee of Architecture and Urbanism), PNC ICOMOS, Polish Section of DOCOMOMO (Documentation and Conservation of Modern Movement Working Party), Polish Centre of OISTAT. Former Chairman of the Board of the SKZ [Polish Association of Conservators] and former Vice Chairman of PNC ICOMOS. Licensed expert of the ministry of Culture, member of many forums and councils, laureate of many awards and prizes, among others: Prize of the City of Cracow (1987), Prize of the Minister of National Education (2001), Award of SARP [Association of Architects of the Republic of Poland], medal of the Committee for National Education (2001), Złoty Krzyż Zasługi [Golden Cross of Merit] and Krzyż Kawalerski Orderu Odrodzenia Polski [Cavalier's Cross of the Order of the Rebirth of Poland] (2001).

Jerzy Jasieńko

Academic qualifications:

Department of Civil Engineering, Technical University of Wrocław: spec.: Building Structures - Master of Engineering - 1977, Doctorate - 1985, Doctor of Science (Habilitation) - 2002.

Experience:

Research Assistant of the Technical University of Wrocław - Lecturer in Civil Engineering Department, Department of Architecture - specialization: Protection of Historical Buildings: Assistant - 1978, Lecturer - 1985, Doctor of Science - 2002.

Teaching experience:

Lectures and classes in: General Building Engineering, Wooden Structures, Repair, Conservation and Reinforcement of Historical Objects - at the Department of Civil Engineering and at the Department of Architecture of Technical University of Wrocław.

Membership in scientific organizations:

Membership in Scientific Committees and Councils -foreign and Polish - among others: Member of Scientific Council of Civil Engineering Department, Member of Scientific Council of Institute of Building Engineering - Technical University of Wrocław. President, Association of Conservators of Historical Buildings, Presidium Member of PKN ICOMOS (Polish National Committee, International Council on Monuments and Sites), Member and Polish Representative, with a vote constituting ISCARSAH-ICOMOS (International Scientific Committee for Analysis and Restoration of Structures of Architectural Heritage - International Council on Monuments and Sites), Member of IABSE, Member of Council for Protection of Historical Buildings at Ministry of Culture - for consecutive term of office 2004-2007, Member of Chief Conservatory Commission - vice-president - for term of office 2002-2006, Member of Scientific Council of Institute of Building Engineering - Technical University of Wrocław, Member of Scientific Council of Civil Engineering Department - Technical University of Wrocław, Member of Section of Wooden Structures - Polish Academy of Sciences, Member of Scientific Council of National Centre for Studies and Documentation of Historical Buildings in Warsaw, Chairman of Council of Lower Silesian Chamber of Civil Engineers.

Scientific research:

On conservation and reinforcement of wooden and brickwork structures using glue joints as well as inserts and steel rods, GR rods, CFRP carbon strips, mats and nets, synthetic resins; decay, deformation and stressing of combined structures; technical state diagnostics of historical structures; conservation programs and projects in the area of historical brickwork and wooden buildings; analytical and numerical modelling of static working of historical structures.

Project and design works:

over 100 building, construction and conservation design projects as well as technical expertise on building objects including historical buildings. Participation in over 50 projects - consultant, verifier.

Over 90 scientific as well as scientific-engineering works/papers published in Polish and foreign periodicals as

well as in conference materials, mainly on: repair, conservation and reinforcement of structural elements of historical buildings, utilization of mechanical and glued joints in restoration of wooden, brick and stone structures, drying and insulating of historical buildings.

Kazimierz Kuśnierz

Born in Cracow in 1948, 1966 – 1971 studied at the Faculty of Architecture, Cracow University of Technology; diploma in architecture in 1971, Doctorate 1982, Doctor of Science degree in 1991; appointed as Professor at the CUT in 1994, received the state title of Professor of Technical Sciences in 1999, Full Professor at the CUT since 2002. Since 1992 Head of the Division and later the Chair of History of Architecture, Urban Planning and Art at the Institute of History of Art and Monument Preservation, CUT. 1995 – 1999 headed the Institute, in 1999 – 2005 – Vice Dean of the Faculty of Architecture for Scientific Affairs. He specializes in history of urban planning and architecture as well as in monument preservation; also a licensed expert of the Ministry of Culture since 1993. Author of 7 books, several hundred publications and scientific papers, promotor of 6 doctoral dissertations in history of urbanism and architecture.

Zbigniew Wikłacz:

Born in Cracow in 1961. In 1981 graduated from the State College of Fine Arts in Cracow. Master of Architecture from the Faculty of Architecture at Cracow University of Technology, 1987. One-year postgraduate studies in the Chair of Computer-Aided Architectural Design, ETH-Zurich, 1993/94.

Professional design license, 1993.

Doctoral degree, 1999.

Since 1988 - teaches fine arts at the Chair of Drawing, Painting and Sculpture at the Faculty of Architecture, CUT. Since 1997 - teaches architectural design at the Institute of History of Architecture and Monument Preservation. Research on use of digital techniques in conservation of historic buildings.

Since 1990 running his own design studio. Author of numerous architectural as well as conservation projects.

Jakub Bil

Jakub Bil was born in Nowy Sącz, Poland. He completed the photography course [Otwarte Studium Fotografii] led by the Faculty of Architecture in Cracow and by Jan Matejko Academy of Fine Arts in Cracow, Department of Intermedia Art.

He also studied at the Jagiellonian University, Department of Eastern Studies, specialization in the Arabic Language; and at the Faculty of Architecture, Cracow University of Technology. Voluntary assistant/trainee at the Institute of History of Architecture and Monument Preservation, Faculty of Architecture, CUT. Winner of the art workshop in Florence (within a group of fine arts students) organized by Fondazione Romualdo Del Bianco. Scholarship at Fondazione Romualdo Del Bianco (graphic art, design), trainee at: architectural and design offices and advertising and art events agencies. Cooperated with design studios (on colour schemes of several buildings and interior design). Organizer, co-organizer or curator of international art exhibitions, art projects, art events. Cooperator of an Italian graphic art foundation.

Active in fields of art such as drawing, graphic art, sculpture, design, interior architecture, architecture, new media. Exhibitions, both individual and group ones, mostly outside Poland. Art works in collections outside Poland, private collections and institutions.