SUMMER SCHOOL OF ARCHITE **CTURE** BELGRADE 2023

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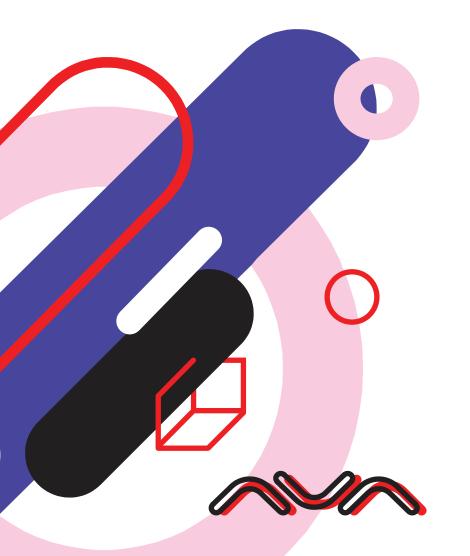
This program is realized as part of the of the Cooperation Agreement between ESTP Paris and the University of Belgrade for the period from 2022. to 2027., contract number 68-7756/1-23, and DETAIL AGREEMENT Of the organization of Summer school 2023 between ESTP Paris and the University of Belgrade – Faculty of Architecture, contract number 02-815/1-23, 07.06.2023.

SUMMER SCHOOL OF ARCHITE CTURE BELGRADE 2023

UNIVERSITY OF BELGRADE FACULTY OF ARCHITECTURE

ESTP - ÉCOLE SPÉCIALE DES TRAVAUX PUBLICS

> BELGRADE JUNE 12 TO JULY 14, 2023





1st WEEK

MONDAY 12.06.

16.00 Welcome speech of the Dean and organizers, presentation of the Summer School program

16.30 Challenges of contemporary Serbian architecture / Vladimir Lojanica, Professor, Dean of UBFA

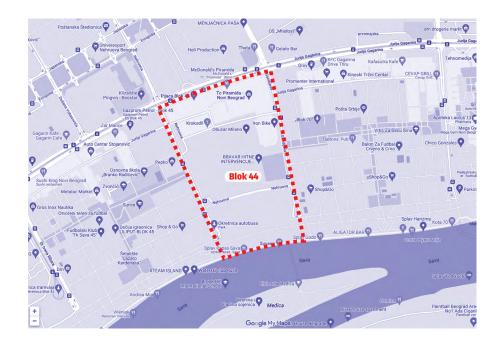
TUESDAY 13.06.

9.00 – 10.30 Architectural creating as an authentic inscription of history - from prehistoric period up to XIX century on the territory of Serbia / Nevena Debljović Ristić, PhD - Assistant professor

11.00 – 12.30 Development of architecture in Serbia in the XX century / Irena Kuletin Ćulafić, PhD - Assistant professor

14.00 WORKSHOP INTRODUCTION: Re-shaping the open block; lecture followed by the walk around the task area - blok 44 New Belgrade

18.00 Reception at the French Institute, Zmaj Jovina 11



WEDNESDAY 14.06.

9.00 – 11.00 Multiscale and Value-Based (RE)Programming Approach to Modernist Heritage: Design Tools and Methodologies for Social Wellbeing Enhancement / Jelena Ristić Trajković, PhD - Associate Professor

11.30 – 13.00 Serbian building stock characteristics – energy performance and material aspects / Dušan Ignjatović, PhD – Professor

14.00 – 15.00 Conservation practice– challenges in Serbia - Lecture in the Cultural Monument Protection Institute / Rade Mrlješ, Architect at Cultural Heritage Preservation Institute of Belgrade

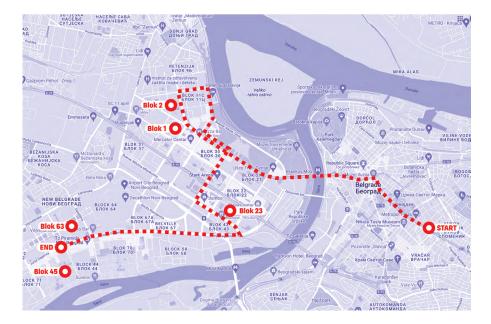
15.00-16.00 Guided tour at Kalemegdan fortress/ Ivana Filipović Jork, Architect at Cultural Heritage Preservation Institute of Belgrade

THURSDAY 15.06.

9.00 – 10.30 Belgrade in plural / Zoran Đukanović, PhD – Professor

11.00 – 12.30 Public art for public space – Dreaming by doing / Zoran Đukanović, PhD - Professor

14.00 – 18.00 New Belgrade forms and patterns – Lecture at UBFA (14.00-15.00) followed by a bus tour around New Belgrade (15.00-18.00) / Tanja Damnjanović Conley, PhD - Associate Professor at Massachusetts College of Art and Design, Boston USA





FRIDAY 16.06.

9.00 – 10.00 Tradition in the use of building materials in Serbia / Radivojević Ana, PhD – Professor

10.15 -11.15 Development of structures and building techniques in Serbia during the 19th and 20th centuries / Ljiljana Đukanović, PhD - Associate Professor

11.30 – 13.00 Green building technologies and certification / Nataša Ćuković Ignjatović, PhD - Associate Professor

14.00 – 16.00 Architectural memory of the city, Lecture followed by a walk around central Belgrade / Ivan Rašković, Professor

2nd WEEK

MONDAY 19.06.

10.00 – 12.00 Re-shaping the landscape / Ana Nikezić, PhD – Professor, Snežana Zlatković, Teaching Assistant with PhD, Vanja Spasenović, M.Arch – Teaching Assistant

14.00-16.00 Recreation potential of urban landscapes / Jelena Živković, PhD - Associate Professor

16.30-17.30 Sustainable urban planning practices: Mainstreaming the Nature-Based Solutions / Ksenija Lalović, PhD - Associate Professor

TUESDAY 20.06.

10.00 – 13.00 WORKSHOP - URBANISM: RESHAPING THE OPEN BLOCK: URBAN DESIGN / Ksenija Lalović, PhD - Associate Professor, Jovana Bugarski, M.Arch, Teaching Assistant

14.00 – 17.00 WORKSHOP – LANDSCAPE: RE-SHAPING THE OPEN BLOCK: LANDSCAPE TRANSFORMATIONS / Jelena Živković, PhD - Associate Professor, Predrag Jovanović, Phd, Teaching Assistant with PhD, UBFA

WEDNESDAY 21.06.

10.00 – 12.00 Development of housing in Serbia/ Vladimir Lojanica, Professor, Dean of UBFA

14.00 – 15.30 Advanced structural systems / Jelena Milošević, PhD - Assistant professor

16.00-17.30 Prefabricated construction systems: possibilities for improvements / Nikola Macut, PhD - Assistant professor

THURSDAY 22.06.

10.00 – 13.00 WORKSHOP - ARCHITECTURE PROJECT DEVELOPMENT: Re-shaping the open block: new structures / Maja Dragišić, PhD - Assistant Professor, Snežana Zlatković, Teaching Assistant with PhD

14.00 – 17.00 WORKSHOP – ARCHITECTURE/CONSTRUCTION TECHNOLOGY

Re-shaping the open block: transformation of existing structures / Nataša Ćuković Ignjatović, PhD - Associate Professor, Tijana Žišić, M.Arch, Teaching Assistant



TUESDAY 27.06.

10.00 – 13.00 WORKSHOP - URBANISM: RESHAPING THE OPEN BLOCK: URBAN DESIGN / Ksenija Lalović, PhD - Associate Professor, Jovana Bugarski, M.Arch, Teaching Assistant

13.00 – 14.00 Guest lecture: architecture of Sava Centar congress hall / Aleksandra Šević, Cultural Monument Protection Institute

15.00 – 18.00 WORKSHOP – LANDSCAPE: RE-SHAPING THE OPEN BLOCK: LANDSCAPE TRANSFORMATIONS / Jelena Živković, PhD - Associate Professor, Predrag Jovanović, Phd, Teaching Assistant with PhD, UBFA

WEDNESDAY 28.06.

10.00 – 11.00 Digital Tools in Circular Built Environment / Ana Nadadži, PhD - Assistant professor, University of Belgrade Faculty of Civil Engineering

12.00 – 13.00 Unlocking Success: Innovative Project Delivery Methods for High-Performance Buildings / Zorana Petojević, PhD - Assistant professor, University of Belgrade Faculty of Civil Engineering

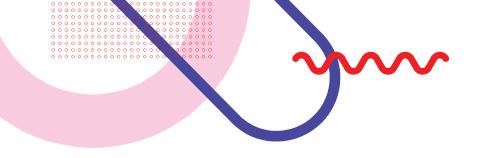
THURSDAY 29.06.

10.00 - 13.00 WORKSHOP - ARCHITECTURE PROJECT DEVELOPMENT:

Re-shaping the open block: new structures/ Maja Dragišić, PhD - Assistant Professor, Snežana Zlatković, Teaching Assistant with PhD

14.00 – 17.00 WORKSHOP – ARCHITECTURE/CONSTRUCTION TECHNOLOGY:

Re-shaping the open block: transformation of existing structures / Nataša Ćuković Ignjatović, PhD - Associate Professor, Tijana Žišić, M.Arch, Teaching Assistant



4th WEEK

TUESDAY 04.07.

10.00 – 12.00 WORKSHOP - URBANISM: RESHAPING THE OPEN BLOCK: URBAN DESIGN / Ksenija Lalović, PhD - Associate Professor, Jovana Bugarski, M.Arch, Teaching Assistant

14.00 – 16.00 WORKSHOP – Landscape: Re-shaping the open block: landscape transformations / Jelena Živković, PhD - Associate Professor, Predrag Jovanović, Phd, Teaching Assistant with PhD, UBFA

WEDNESDAY 05.07.

9.00-11.00 Earthquake effects on structures and innovative systems for earthquake protection / Marko Marinković, PhD - Assistant professor, University of Belgrade Faculty of Civil Engineering

11.00 – 12.30 HYPER FAÇADE – innovative façade design solutions / Nenad Simić, architect

14.00 – 15.00 visit to the Sava Centar congress hall refurbishment construction site

THURSDAY 06.07.

10.00 – 12.00 WORKSHOP – ARCHITECTURE PROJECT DEVELOPMENT: Re-shaping the open block: new structures/ Maja Dragišić, PhD - Assistant Professor, Snežana Zlatković, Teaching Assistant with PhD

14.00 – 16.00 WORKSHOP – ARCHITECTURE/CONSTRUCTION TECHNOLOGY: Re-shaping the open block: transformation of existing structures / Nataša Ćuković Ignjatović., PhD - Associate Professor, Tijana Žišić, M.Arch, Teaching Assistant

5th WEEK

TUESDAY 11.07.

10.00 - 13.00 WORKSHOP FINALIZATION / all workshop coordinators

WEDNESDAY 12.07.

PREPARATION OF FINAL PRESENTATIONS

THURSDAY 13.07.

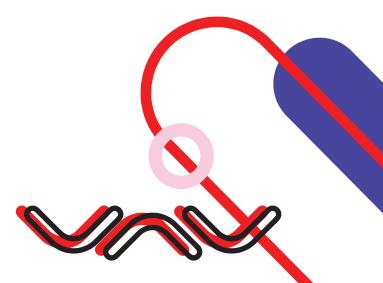
PREPARATION OF FINAL PRESENTATIONS

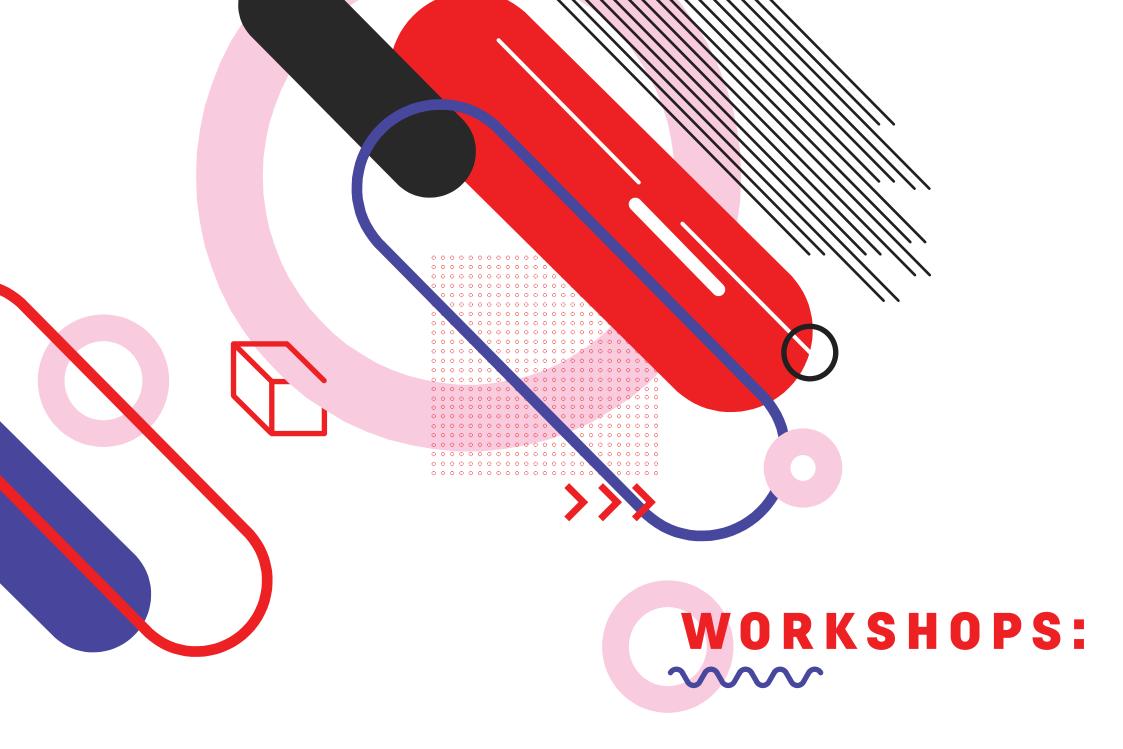
FRIDAY 14.07.

10.00 – 12.00 Exhibition of workshops' results and student presentations

12.00 Wrap up and closing speech

20.00 FAREWELL DINNER/PARTY





URBANISM: Reshaping the open block: urban design

Ksenija LALOVIĆ, PhD, Associate Professor, UBFA Jovana BUGARSKI, M.Arch, Teaching Assistant

The chosen case study area - Block 44 - is one of the seventy-eight blocks that comprise the New Belgrade located on the left riverbank of river Sava in the western part of Belgrade which was planned on the basis of various competitions in the 1960ies, during the socialist era of former Yugoslavia. Like other mass building complexes, Block 44 faces challenges such as poor maintenance, social segregation, and the lack of integrated development plans. Even though it was developed in 1986. when the original planning approach evolved, Block 44 lacks some urban design qualities, such as original architectural solutions and public/ semipublic open spaces enhancing community activities, etc., that enabled older neighboring Blocks 45 and 70 to evolve throughout the past decades to a highly dynamic and attractive, family-friendly neighborhood. Nevertheless, Block 44 with its prominent location at the Sava Riverfront, is inhabited by citizens that developed a deep sense of belonging and ownership and often spend their lifetimes here. Vast open spaces in combination with existing infrastructure foster an urban densification process, which can have several negative impacts. The infrastructure may become overloaded, too high density might cause ecological damage, gentrification might take place and a loss of green spaces may weaken the livability and the resilience towards climate change. On the other hand, infrastructure and open spaces seem to still have some reserves left, so controlled densifications seem reasonable to avoid the construction of new city districts on the greenfield causing even more ecological damage.

The aim of the workshop project is to explore urban design strategies for further sustainable development and improvement in an integrated way simultaneously ensuring settlement resilience, livability, health and well-being. The workshop should result in innovative ideas and a wide range of possible urban design interventions that could boost the sustainable transformation of the area.





LANDSCAPE: Re-shaping the open block: landscape transformations

Jelena ŽIVKOVIĆ, PhD, Associate Professor, UBFA Predrag JOVANOVIĆ, Phd, Teaching Assistant with PhD, UBFA

The LANDSCAPE workshop will focus on reading, understanding and transforming existing landscape of Block 44 through the lens of "play". PLAY is one of the basic phenomena of human existence that permeates and reflects all other domains of life, and may function as a social amalgam. Play can also be understood as a metaphor and expression of human freedom and choice.

Students will explore the potential of play (as concept, activity and design problem) in order to rethink the relation between man and nature, and to create places where urban nature is revealed and enjoyed. Their task will be to propose spatial intervention in public space on chosen location in Block 44, while taking into account specific natural and socio-cultural context. In this way, a new "playscape" will be developed as a part of MULTIFUNCTIONAL GREEN INFRASTRUCTURE of Sava Blocks in New Belgrade that supports eco-friendly forms of energy, water and waste management and urban food production.

The workshop will be conducted through four phases: a) Understanding landscape and context, b) Concept (play-nature system and elements), c) Design (multifunctional spatial intervention) and, d) Presentation-reflection.



ARCHITECTURE project development: Re-shaping the open block: new structures

Maja DRAGIŠIĆ, PhD, Assistant Professor, UBFA Snežana ZLATKOVIĆ, PhD, Teaching Assistant with PhD

The theme of the architectural project workshop is based on the question of how to think big and build small in order to challenge Modernist heritage. Working on the architectural project of the new structure in the highly complicated context of block 44 in New Belgrade, students will be encouraged to explore different scenarios of urban futures and to investigate alternative city usage in the face of contemporary demands. Transformation of traditional values and principles of Modernism into new spatial concepts and models, will be tested on the smallscale project that should be treated with more ephemerality and replaceability. contrary to the traditionalist approach to the eternal in architecture. The aim of the workshop is to examine whether the new architecture is able to be flexible and adaptable enough to become a natural extension of Modernism identity. The architectural project will be developed as a study of characteristic fragments of a small scale project, dealing with several research questions: what is the idea: analysis of context in terms of the ideas for the new structure, how to understand the idea: programmatically and spatially examine the possible architectural concepts, how to develop architectural concept from the idea; development of the new structure and how to present the idea: finalization and presentation of architectural project. Design process should be understood as the study of terms and procedures that make up the language of Modern architecture, from inspiration and idea, through elaboration and verification, all the way to the graphic and expressive aspect of the architectural project.

ARCHITECTURE/CONSTRUCTION TECHNOLOGY: Re-shaping the open block: transformation of existing structures

Nataša ĆUKOVIĆ IGNJATOVIĆ, PhD, Associate Professor, UBFA Tijana ŽIŠIĆ, M.Arch, Teaching Assistant

Transformation of existing structures is, in fact, a quest for new qualities of the 40+ years old buildings that can be delivered through contemporary architecture/construction technology. Obsolescence has its social, spatial, aesthetic and aspects intertwined with functional and technological issues. Thus, the transformation demands a specific approach, sensitive to multiple layers as well as perception of today's demands and future (un)certainties.

The workshop tackles the issue in several steps. Step 1 refers to "diagnosis", identifying the potentials and current shortcomings; Step 2 is dedicated to defining proper "strategies", i.e., the responses to the Step 1; Step 3 is "action" – deployment of selected strategies in designing the transformation of existing structure, while Step 4 is "wrap-up" and production of the final presentation.

While each student is developing an individual response to the workshop task, the steps are done in teams, stressing the necessity of collaboration and teamwork. As the result, the reflections and results of all participants are, in a certain way, embedded in the final proposal, introducing the notions of "sustainability" and "efficiency" in the design process.









Challenges of contemporary Serbian architecture

The fist lecture will have a thematic scope of different paradigms that can be noticed in current Serbian architectural practice, and the way they shape our cities and notion of contemporary architecture. This introduction will enable students better understanding of spatial, aesthetic, programmatic, and technological implications of these paradigms, as they will most certainly notice many of them in, for many probably, the first encounter with our city and culture.

Vladimir LOJANICA is a distinquished architect and Dean of the University of Belgrade - Faculty of Architecture. He is a Professor at the Department for Architectural Design. His professional and scientific interests lie in the vast discipline of architectural design and housing issues. His architecture office Proaspekt, founded in 2004, won numerous prizes for realized projects and in domestic and international architectural design competitions. He won the annual prize for architecture of the Union of Serbian Architects in 2007 for complex of Holliday Inn hotel and Expo hall XXI, and Grand prize of the 37th annual architecture exhibition for Acumincum winery. Apart from architectural design and practice he published numerous papers in scientific journals and monographs, and teaches Housing and Design Studio subjects. He is a member of numerous professional organizations and advisory boards.

Development of housing in Serbia

Residential architecture being one of the most responsible for the look, size, shape and the soul of our cities is again, maybe more than ever in focus of planners and architects due to constant demand to meet speeding demographic changes. How we dealt with the same problem in the past, what is happening now and what we can expect in days to come - experiences from a local context.

Architectural creating as an authentic inscription of history - from prehistoric period up to XIX century on the territory of Serbia

To get to know a country and its people, the past holds a particularly important place. Preserved and non-preserved material evidence from the past enables the reading of history through architecture, as well as the understanding of architecture thanks to history. An overview of architectural creating in the territory of today's Serbia is presented through four chronological markers: The Prehistoric Period - the development of the first urban cultures; The Roman Empire - architecture at the Limes, Medieval endowments and the Serbian Kingdom; Oriental heritage and the influx of European influences in the 19th century.

University of Belgrade - Faculty of Architecture, at the Department for History and Theory of Architecture and Art. She began her professional career at the Republic Institute for the Protection of Cultural Monuments - Belgrade (2000). In this institution, she achieved the highest rank as an architect, conservation advisor. She is the author of many conservation and restoration projects. For the Studenica (12th century) and Sopoćani (13th century) UN-ESCO WHS monasteries, she was the coordinator of professional teams and the manager of architectural research, project development and monitoring of works (2009-2021). She is the co-author of a large number of studies on the protection of immovable cultural assets for spatial plans. During her career, she has taken part in numerous international scholarly conferences. The annual award of the Association of Conservators of Serbia, she received in 2018. She is a member of the editorial boards of several scientific and professional journals, she is a member of the Executive Board of ICOMOS Serbia, as well as the Association of Conservators of Serbia and the Chamber of Engineers of Serbia.

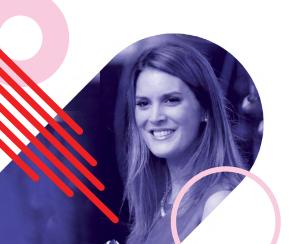
Nevena DEBLJOVIĆ RISTIĆ, PhD

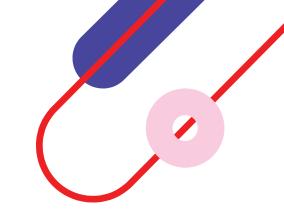
is an Assistant professor at the



Development of architecture in Serbia in the XX century

This lecture will focus on the development of Serbian architecture of the 20th century through three significant periods: 1. The period of liberation of the Serbian state from Ottoman rule at the end of the 19th century and the creation of the independent Kingdom of Serbia (1878-1918), 2. The period of constitution of the Kingdom of Serbs, Croats and Slovenes (later the Kingdom of Yugoslavia) after the First World War (1918-1941) and 3. The period of the constitution of the Socialist Federal Republic of Yugoslavia after the Second World War until the dissolution of Yugoslavia in 1991 (1945-1991).





Irena KULETIN ĆULAFIĆ, PhD is

an Assistant professor at the University of Belgrade - Faculty of Architecture, at the Department for History and Theory of Architecture and Art. er professional interests include history, theory, aesthetics and philosophy of art, architecture, applied arts and design, environmental aesthetics and everyday aesthetics in architecture, urban design, enterior design and industrial design, protection of cultural tangible and intangible heritage. She is the author and co-author of books, as well as many scientific research papers. In 2011 she received international architectural award Ranko Radović for the book The Aesthetic Theory of Architecture of Marc-Antoan Laugier. She is member of several scientific and professional associations: Association of Belgrade Architects (DAB), Union of Architects of Serbia (UAS), Association of Art Historians. Society for Aesthetics of Architecture and Visual Arts of Serbia (DEAVUS), L'Association des diplomes de l'ensiegnement superieur français (ADEF), L'Association des Centraliens (AECP) and Associazione Consorti Dipendenti Ministero Affari Esteri (ACDMAE).

Maja DRAGIŠIĆ, PhD is an architect and Assistant professor at the University of Belgrade - Faculty of Architecture, at the Department for Architectural Design. She obtained MSc (2004) and a Ph.D. degree in Architecture (2017) within the field of Architectural Design and Contemporary Architecture from the University of Belgrade - Faculty of Architecture. Her research interests lie primarilv in the field of contemporary architectural design, exploring methodologies of deformability in architecture, specifically the influence of topology and higher geometry in adaptive design strategies. Her research work is highly practice-based, since she is one of the founders of Spring Studio, Belgrade based architectural group focused on architectural projects design with deeply experimental approach. Through participation in architectural and urban design competitions and exhibitions, her work was rewarded several times.





WORKSHOP: ARCHITECTURE project development: Re-shaping the open block: new structures

The theme of the architectural project workshop is based on the question of how to think big and build small in order to challenge Modernist heritage. Working on the architectural project of the new structure in the highly complicated context of block 44 in New Belgrade, students will be encouraged to explore different scenarios of urban futures and to investigate alternative city usage in the face of contemporary demands. Transformation of traditional values and principles of Modernism into new spatial concepts and models, will be tested on the small-scale project that should be treated with more ephemerality and replaceability, contrary to the traditionalist approach to the eternal in architecture. The aim of the workshop is to examine whether the new architecture is able to be flexible and adaptable enough to become a natural extension of Modernism identity.



Multiscale and Value-Based (RE)Programming Approach to Modernist Heritage: Design Tools and Methodologies for Social Wellbeing Enhancement

This lecture aims to explore ways to improve the relationship between modernist heritage and social wellbeing. It will examine the importance of the specific context and ideology of modernist heritage development and address contemporary societal and environmental needs related to its reuse. The lecture will also discuss the potential of multi-scale and value-based architectural programming methodological framework, as well as the potential of different design tools in architectural design to enhance the social dimension of heritage protection and reuse. It emphasizes the importance of shifting the focus from solely material and formal values of heritage to social and cultural ones.

Jelena RISTIĆ TRAJKOVIĆ, PhD

is an Associate Professor at the University of Belgrade - Faculty of Architecture and at the University of Arts in Belgrade - Faculty of Applied Arts, where she is involved in both practical / design studio and theoretical design courses. With a background in architecture, her research interests include cultural and ecological aspects of design, environment-behavior theories in design, design for health and wellbeing, cultural heritage, and generally a design methodology in terms of climate change, regenerative and responsible architectural and urban design. She is involved in several research projects, and networks mainly focused on climate and societal changes as a central theme, especially on educating the professional and general public in the context of developing a critical reflection on society and cities.



Serbian building stock characteristics – energy performance and material aspects

Having in mind the significance that built heritage represents for adequate formulation of sustainable development strategies, lecture aims to present the complexity and diversity that depicts its structure and main material and performance characteristics. Based upon the executed research and results, lecture explains the methodological approach of Typology development and definition of a model buildings, as representatives of statistical averages, that were used for formulation of refurbishment strategies. Investigating the principles of various refurbishment levels lecture illustrates the potentials and possible benefits of the process.

the Department for Architectural Technologies and a member of the Faculty management as a Vice Dean for Finance and Business Cooperation. As expert and researcher, he has been involved in numerous international and domestic scientific project as a team leader, coordinator and researcher. His expertise in Building typology and energy efficiency has enabled him active participation as invited speaker and lecturer in numerous national and international professional trainings, workshops and symposiums. Apart from the academic work he is taking actively participating in professional and social activities through the involvement in working groups for development of the regulations in the field of EE, and building refurbishment, managing board of Association of Belgrade Architects and in Serbian Chamber of engineers as a lecturer in the field of EE. He has designed numerous buildings covering great variety of programs, in various cultural and climatic conditions (Gabon, Equatorial Guinea, Serbia, Montenegro, Russia, Greece). His practice was presented in more than 20 group exhibitions with international selection as well as individual author exhibitions. He holds professional license for design ITC Level 1. LEED GA and Energy efficiency.

Dušan IGNJATOVIĆ, PhD is a Pro-

fessor at the University of Bel-

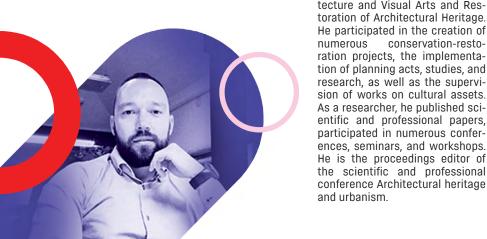
grade - Faculty of Architecture, at

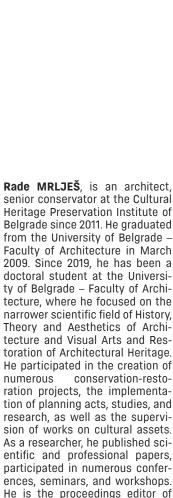


Conservation practicechallenges in Serbia

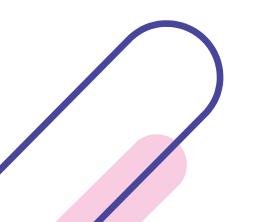
Architectural and urban conservation as a set object of analysis will be observed through the urban development of Belgrade, i.e. as an instrument of typomorphological processes of transformation of historical urban heritage. In the processes of typomorphological transformations, the problems of lack of cultural identity and meaning in historical zones are often observed, as well as the general absence of coherence of urban form in cities with a fragmented urban heritage such as the city of Belgrade. The presentation will include the chronology of development and the structure of the architectural and urban heritage of the capital and an overview of the activities of the Institute for the Protection of Cultural Monuments of the City of Belgrade in the implementation of cultural property restoration projects.

This lecture will take place in the Cultural Monument Protection Institute of Belgrade at Kalemegdan fortress.





Ivana FILIPOVIĆ JORK, is a senior conservator architect at the Cultural Heritage Preservation Institute of Belgrade. Organizes and participates in research, study and valorization of the architectural heritage, in the development of projects for rehabilitation, conservation, restoration, revitalization and presentation of the architectural heritage, performs conservation supervision over the implementation of technical protection measures of the architectural heritage. In her work at the Institute, she primarily deals with the Belgrade Fortress. As a responsible architect, she executed many projects for the fortress. She is member of the Chamber of Engineers of Serbia and member of ICOMOS Serbia.





Guided tour at Kalemegdan fortress

The Belgrade Fortress is a cultural property of exceptional importance for Serbia. Due to its position above two rivers, it offers a magnificent view of a picturesque, dynamic landscape. It represents the urban and cultural nucleus of Belgrade. The fortress of Belgrade, its construction and development are inseparable from the history and present life of Belgrade. Nowadays, it is a favorite place and meeting point, it stands like a museum and proof of the past. Growing on one and the same place, from prehistoric settlements and the Roman castrum to a Byzantine castel, from a mediaeval fortified town to a modern bastion fortification, the fortress has been proof of its highly significant geostrategic position for centuries. In the last few decades, interest has been expressed in the inclusion of the Belgrade Fortress in the modern life of the city, primarily through investments in conservation and restoration works, but also in works on the preservation and use of the space of the Belgrade Fortress, as a unique urban ensemble. Some of the topics for the tour that will be presented to the student are development of the fortress, its position, some parts of the fortress where specific works were executed: what kind of investigative works were applied prior to the projects and how the works are done; what kind of problems are present and represent obstacles to the preservation of the fortress in its original form.



Belgrade in plural

Whenever I think about Belgrade, I don't think about any particular place there. I always imagine my city in its totality, as a big, complete image, filled and framed by the vivid dreams and fears of the people who reside there. In real life, Belgrade is fragmented by its geographical characteristics; by its wounds of the recent wars; by its ambivalent multicultural character – but deep in my mind, it's actually indivisible. Belgrade is the capital of Serbia, a small European country currently challenged by a comprehensive, multilevel transition from autocracy to democracy, from socialism to capitalism, from collectivism to individualism, from atheism to zealotism, from isolation to globalization, from celebrated to scorned and vice versa.

Public art for public space

Public art Public space (PaPs) is an educational interdisciplinary program that aims at integrating art into public spaces and city life as a way of improving their quality. It was established in 2003 at the Faculty of Architecture University of Belgrade, with a purpose to explore alternative approaches to academic urban design education. During the last twenty years, Public Art and Public Space program explores possibilities for redefinition of public spaces use and design, through recognition of the importance to educate students in the field of public art, as well as to train them to collaborate with different professions and local community in realization of their projects.

Zoran ĐUKANOVIĆ, PhD, architect, Professor of Participatory Urban Design, Urban Housing, Urban History and Public Art at the University of Belgrade, Faculty of Architecture, Department of Urbanism, Belgrade, Serbia. Initiator, founder and leader of the international, interdisciplinary research Program Public Art & Public Space. Visiting professor at Sapienza University of Rome (Italy), Keio University of Tokvo (Japan). University of Sassari (Italy), Politecnico di Bari (Italy).

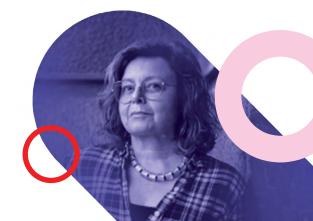


Tanja D. CONLEY is Associate Pro-

fessor at Massachusetts College of Art and Design in Boston - USA, teaching History and Theory of Architecture and Urbanism. Previously she worked as a senior advisor on urban conservation at the State Institute for the Protection of Cultural Heritage in Belgrade - Serbia. Her early research published in Serbian and English focused on the influence of Central European architectural centers on the formation of Serbian architectural academia in the late 19th and early 20th century. Conley's more recent list of publications include titles such as: Capital Cities in the Aftermath of Empires: Planning in Central and Southeastern Europe, Belgrade and Beyond: Reading Serbian Architectural Landscapes and "Conceptualizing National Architectures: Architectural Histories and National Ideologies among the South Slavs" in Nationalism and Architecture. Her newest book Urban Architectures Interwar Yugoslavia, developed from her PhD dissertation from Cornell University, was published by Routledge in 2020.

New Belgrade forms and patterns

This lecture is followed by a tour around New Belgrade most prominent architectural landmarks. Start is at the top of Ušće tower, former Central Committee building, which was damaged in the NATO bombing of 1999 and later refurbished. The panoramic view offers an insight into New Belgrade structure and urban lavout. We continue down the Boulevard of Mihailo Pupin and stop to observe the grandiose Palace of Serbia, former "The Palace of the Federation" building, known just as - SIV. Next stop are the residential blocks 1 and 2, and their commercial center, known as "The Fountain". After a short walk we continue to see the building of Hotel Yugoslavia at the bank of the Danube River. Next stop is the residential block 23, as we continue towards the bank of the Sava River and residential blocks 63 and 45.



Tradition in the use of building materials in Serbia

The availability of material resources being the key to the building process is best observed in the case of traditional architecture where this principle is most directly reflected. In Serbia, this historical paradigm changed at the beginning of the 19th century when it gradually gained independence from the Ottoman Empire, becoming open to the influences of Central and Western Europe that reflected in the material aspect and characteristics of construction. Since then, Serbia has followed the steps of developed European countries, so the new materials of the time were used in buildings, and the building materials industry developed. After the First World War. Serbia became part of a larger country - Yugoslavia, increasing the availabilitv of resources and enabling faster economic and urban development. In the following

period of socialism, after the Second World War, there was an accelerated development of both the construction industry and construction technologies, which on a large scale included industrialized construction. The transitional nineties of the 20th century brought new social changes that resulted in a reduction in the scope of construction, carried out with a significantly reduced palette of construction materials. However, a kind of renaissance of the construction industry that is happening in recent years brings in new architectural problems and dilemmas.

Ljiljana ĐUKANOVIĆ, PhD is an Associate professor at the University of Belgrade - Faculty of Architecture, at the Department for Architectural Technologies. Her scientific interests focus on the field of Building technology (from the standpoint of historical and contemporary construction). energy efficiency and improving housing stock in order to improve comfort. She is author of the book: Comfort in Belgrade residential buildings. She is also the coauthor of seven books about improving energy performances of residential and public buildings in Serbia, as well as numerous papers published in domestic and international journals.



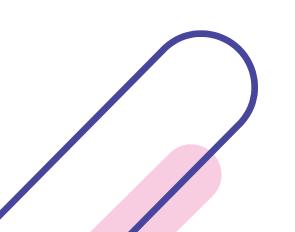
Development of structures and building techniques in Serbia during the 19th and 20th centuries

From the early 19th century Ottoman domination started to weaken in the Balkan region and Serbia moved towards political independence and giving way to the Western, mainly Central European, influence. In rural settlements, the natural and climatic conditions had a primary impact on the house characteristics with the readily available materials, such as wood, earth and stone, dominating in the vernacular architecture. Three main construction techniques dominated the rural houses: log-cabins, timber-framed houses and rammed earth house. Urban houses followed the same construction principles as the timber-framed rural ones and the eastern type of urban houses developed by the Ottomans in Asia Minor and Balkan region. Changes refer to transformation of building types and structures imported from Central Europe in the mid-19th century, as well as to the use of new building materials which were not necessarily natural in their origin but were the subject of various technological processes, such as use of brick, cement and concrete. This type of construction remained in urban areas until the end of the Second World War, when the mass application of prefabricated construction began



Ana RADIVOJEVIĆ, PhD is a Pro-

fessor at the University of Belgrade - Faculty of Architecture, at the Department for Architectural Technologies. She attended several specialized trainings, including the First International Course on the Conservation of Ancient Masonry in Byzantine Architecture - CAMBA in Thessaloniki and the pilot course Sharing the Science of Conservation: Towards a Common Language in Paris. In 2002 she conducted a research study at the Aristotle University of Thessaloniki. Her research focus is on building materials and building physics, with particular interest in traditional building materials, historic structures and building techniques.





Lecture: Green building technologies and certification / WORKSHOP -ARCHITECTURE/CON-STRUCTION TECHNOL-OGY: Re-shaping the open block: transformation of existing structures

Rather than offering a firm definition of green/sustainable building, the lecture aims to initiate discussion and reflections on contemporary green design concepts – what is perceived as green architecture, what is formally acknowledged as green architecture and which design approach could be sustainable. Green building certification systems may provide valuable design tools and help achieve sustainability goals, but they are also often used as a tool for "greenwashing". Critical thinking is, therefore, becoming as important as formal knowledge if we are seeking truly sustainable solutions.

Nataša ĆUKOVIĆ IGNJATOVIĆ. PhD is an Associate professor at the University of Belgrade - Faculty of Architecture, at the Department for Architectural Technologies. She has organized and mentored numerous extracurricular activities, including participation at Solar Decathlon Middle East 2018 competition (TwistBox team), W.A.Ve Abroad workshop (with IUAV) etc. The extensive bibliography with research results includes 8 monographs (7 international) and numerous scientific papers, conference papers and other, mainly international, publications. She has designed numerous buildings covering wide variety of programs, showing high sensitivity to various cultural and climatic conditions (Gabon, Equatorial Guinea, Serbia, Montenegro, Russia, Greece). Her practice was presented in more than 15 exhibitions with international selection, and she holds numerous entries and awards in international and national architectural design competitions. Professional licenses include LEED AP BD+C (Building Design and Construction. since 2012) and national licenses responsible designer - architecture (since 2002), and responsible energy efficiency engineer (since 2013).

Ivan RAŠKOVIĆ is a distinguished architect and Professor at the University of Belgrade - Faculty of Architecture, at the Department for Architectural Design. His professional engagement is focused on architectural and urban design in theory and practice. His architecture office AGM (partner with B.Petrović and N.Jelić) founded in 1998, won numerous prizes for realized projects. He won numerous annual prizes (Ranko Radović prize for architecture, Grand prize of the annual architecture exhibition, Novosti prize) as well as several dozens of prizes in domestic and international architectural design competitions. With B.Petrović he published a monograph Tradition-Transition: use of heritage in architecture. He is chairman of the architecture section in Serbian Chamber of engineers. He was the president of the Association of Belgrade Architects and the National commissioner of the Venice architecture biennale in 2014

Architectural memory of the city

This lecture is taking place on the streets of Belgrade city center, walking from Kosančićev Venac to Dorćol area. In this walk, along the Kralja Petra street, many layers of architectural history intertwine and a diverse street front tells many stories about prevailing ideas, concepts, longings, everyday life and events that shaped our city and its urban fabric. The ambient of Kosančićev venac. historical buildings of Princess Liubica's Residence and Question Mark tavern, The Cathedral Church of St. Michael the Archangel and the administrative seat of the Serbian Orthodox Church - The Building of the Patriarchate, residential building designed by architect Milorad Macura, the first department store building in Belgrade, relation to the heritage and historical buildings in the contemporary architectural design, memory of the Jewish and Muslim legacy in Belgrade in the streets of Dorćol area (the building of the Fresco museum, Bajrakli Mosque buildings) are just some of the buildings and themes that will be presented during this walk.



Re-shaping the landscape

In the age of ecological and climate uncertainties, looking at the landscape as a unique spatial, functional and cultural entity for the place it creates and not only as a picture it represents, reshaping becomes a matter of dynamic social, economic and ecological changes and heterogeneity. Therefore, it is seen as both socio-ecological and perceptual legible, a territory culture, process, production of everyday life. It constitutes the mirror of history, meeting natural and cultural i.r. Urban processes in the overall eco-social well-being of the place. This hybrid character of contemporary urban landscape asks for renewed models and tools as to better understanding and responsibly reshape it.





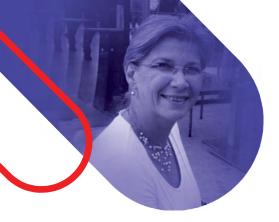
Ana NIKEZIĆ, PhD is a Professor at the University of Belgrade - Faculty of Architecture, at the Department for Architectural Design. With more than 20 years of teaching experience in the area of Architectural and Urban design and over 14 years of experience in research projects. Since 2010 she is a member and mentor for the elaborations of doctoral thesis. In 2015 she was named Vice Dean for post-graduate studies and in 2018 Vice Dean for Education and Research. Nikezić has published over 30 papers in internationally recognized publications and is the author of the book "Formats for Urban Living - Family House in a Contemporary City". Additionally. she is the editor and one of the authors of the scientific monograph "Playing Landscape - Košutnjak: Principles of Architectural Design in the Context of Climate Change". published by the Faculty of Architecture. Her research and architectural designs have been showcased at prestigious events such as the Salon of Architecture and the Salon of Landscape Architecture. She actively participates in organizing domestic and international conferences and has taken part in numerous workshops. Her academic focus includes exploring the connections between architecture and nature, urban culture, sustainability, heritage, and promoting socially responsible architectural education through an interdisciplinary approach.

Jelena ŽIVKOVIĆ, PhD is an Associate Professor at the University of Belgrade - Faculty of Architecture, at the Department of Urbanism. She is the co-director of the educational interdisciplinary program - Public Art & Public Space and the co-head of the Vital Places Lab - a research laboratory at UBFA. Her research, teaching and professional work focus on: theory, practice and pedagogy of urban design; planning and design of open and recreational spaces; ecological urbanism: public art and place-making. She has been involved in several national and international research projects, and published over 100 articles, conference papers and chapters in monographs. Under her mentorship, students have been winning major national and regional awards. She was a member of the planning team for the Strategy and Spatial Plan of the Republic of Serbia, and a member of the National Expert Team for the European Landscape Convention.



Lecture: Recreation potential of urban landscapes / WORKSHOP – Landscape: Re-shaping the open block: landscape transformations

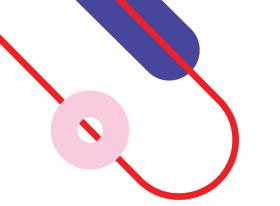
The challenge for architecture and urbanism today is to help develop healthy and vital cities where people and nature can thrive together. Recreation has long been recognized as an activity that significantly contributes to human physical, mental and social health and well-being, and is at the same time compatible with urban nature protection. Nowadays, the importance of urban recreation is additionally emphasized based on the role it can play in sustainable urban regeneration and development. In that sense, providing quality recreation experiences is an important urban quality factor to be achieved through urban planning and design. This lecture focuses on the spatial dimension of urban recreation to open up the discussion on what constitutes the recreation potential of the urban landscape and how to capitalize on it for the benefit of both humans and nature.



Lecture: Sustainable urban planning practices: Mainstreaming the Nature-Based Solutions / WORKSHOP - Urbanism: Reshaping the open block: urban design

Nature-Based Solutions (NbS) are currently considered the main paradigm that could contribute to the future sustainability of urban settlements. This powerful syntagm stresses human development in synergy with nature as the most important norm that enables facing global challenges. The NbS call for innovative transitions of cities, both in their structure and in their strategies and actions. Urban planners and designers should play an important leadership role in this process. However, they should be empowered with specific knowledge and skills. This presentation aims to provide a guide map for young professionals for this quest. It will present the basic NBS concepts, and challenges of mainstreaming the NBS in urban planning and design, stressing the research fields important to be considered for future innovative practices.

Ksenija LALOVIĆ, PhD is an Associate Professor at the University of Belgrade - Faculty of Architecture. at the Department of Urbanism. Her professional career focuses on research and practice in a field of informed and sustainable strategic urban transformations. primarily on ICT supported planning and collaboration methods, techniques, and tools. Since 1992, she was engaged in five national scientific projects (from 2011 as a subproject leader), and also in five international projects (UN-HABI-TAT SIRP, EU FP6 PARAMOUNT, 100 Resilience Cities, MAECI - Learning Economies, Horizon 2020 - CLEVER Cities). She gained a significant professional planning experience trough 24 adopted spatial and urban plans and 14 urban studies. She won 15 different national and international awards. The latest is Zero2020 Award for Innovative Practice 2020 on Inclusive Education and ICT for Improving Research And Training On Urban Accessibility And Universal Design at the University of Belgrade - Faculty of Architecture.

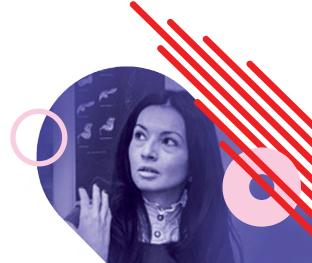


Jelena MILOŠEVIĆ, PhD is an As-

sistant professor at the University of Belgrade - Faculty of Architecture, at the Department for Architectural Technologies. She teaches courses theocratical coursed on Structural Systems and spatial structures and structural design course. Her scientific research focuses on structural systems and spatial structures, structural design, structural morphology, form-finding, and optimization of structures. She is a participant in national and international scientific research projects. She is the author of papers published papers in journals, conference proceedings, and monographs. The focus of her professional engagement is architectural and urban design. As a designer, she worked at company Archicon d.o.o. Belgrade (2006-2012), in which she was deputy director (2009-2012). She is the author of several competition designs. She has participated several exhibitions. She is a member of the Serbian Association for Geometry and Graphics (SUGG). the Serbian Association for Earthguake Engineering (SUZI), and the International Association for Shell and Spatial Structures (IASS).

Advanced structural systems

The lecture on Advanced Structural Systems delves into the cutting-edge technologies and innovative approaches that are revolutionizing the field of structural design. The presentation will explore a diverse range of topics, including state-of-the-art materials, computational modelling techniques, and innovative design methodologies. Through real-life case studies and expert insights, students will gain an understanding of how these innovative systems are shaping the future of architectural design and construction. The presentation aims to inform and inspire students for potential further exploration in this dynamic and rapidly evolving discipline.



Industrialized construction of residential buildings

The aim of the lecture is to introduce students to the principles of industrialized construction that were applied in the second half of the 20th century. Industrialized construction as a way of realizing residential buildings and large settlements like New Belgrade made it possible to develop different construction technologies. During that period different systems of semi-prefabricated and prefabricated construction were developed parallel to the traditional (in-situ) and improved traditional construction technologies. Those technologies enabled the development of various skeletal and massive - panel systems of the load-bearing structures, which further enabled the application of various systems of facade envelopes. In this regard, the goal is to present students different applied systems of load-bearing structures and approaches in the materialization of facade envelopes, which can be characterized as diverse considering the application of different materials such as reinforced concrete, different lightweight concrete, ceramic products, etc.



Nikola MACUT, PhD is an Assistant professor at the University of Belgrade - Faculty of Architecture, at the Department for Architectural Technologies. He obtained his PhD degree in 2022, with the thesis titled: FORMATION OF RENOVATION MODELS FOR REINFORCED CON-CRETE FACADES ON THE EXAMPLE OF MULTIFAMILY BUILDINGS OF NEW BELGRADE. He is an author of several scientific papers and participant in the implementation of several scientific research projects in cooperation with the Faculty of Electrical Engineering and the Faculty of Mechanical Engineering of the University of Belgrade. He participates in scientific conferences and workshops and he is actively involved in architectural design in practice.

Aleksandra ŠEVIĆ is a licensed architect, an assistant director (since 2014) and a senior conservator architect (since 2004) at the Cultural Heritage Preservation Institute of Belgrade. She is currently named a supervisor of activities in the reconstruction process of Sava Centar congress hall. She was also part of the team in the evaluation and recognition of Sava Centar congress hall as a monument of cultural significance. In her professional career she took part, lead and supervised many reconstructions, adaptation and revitalization projects. She is member of the Chamber of Engineers of Serbia and member of ICOMOS Serbia.



Architecture of Sava Centar congress hall





Digital Tools in Circular Built Environment

The built environment significantly impacts our planet, accounting for a substantial portion of global energy consumption, waste generation, and carbon emissions. However, the emergence of digital tools and technologies has opened possibilities to reshape how we design, construct, and manage our buildings to ensure a sustainable and regenerative future. This lecture aims to shed light on the potential of digital tools to lead the green transition in all phases in the built environment. It will focus on how digital tools (BIM, AI, BCT, GIS, IoT) can enhance the preuse phase and its decision-making process, design optimization, materials and resource management in the construction phase, facility management and end-of-use phase, and collaboration of stakeholders in all phases.

Ana NADAŽDI, is an Assistant Professor at the Department of Construction Project Management at the University of Belgrade, Faculty of Civil Engineering. She teaches courses related to site organization, project management and quality management. As a researcher, she focuses on the circular economy, sustainability assessments, and ex-ante and expost analyses of the road transport, energy and waste management sectors. She has over ten years of experience as a Contract Management Consultant on various construction projects, from residential and road infrastructure projects to industrial and hospital building projects.

Unlocking Success: Innovative Project Delivery Methods for High-Performance Buildings

In this lecture, it will be explored the need for a project delivery method that addresses the challenges faced by the construction industry and aligns with the goals of maximising project value and achieving exceptional outcomes. It will be discussed the importance of integrating various aspects from the early stages of a project, adopting an integrated and interdisciplinary approach, and embracing a proactive and adaptive mindset to navigate the complexities of modern construction projects. Additionally, it will be examined how sustainability, circularity, and digitisation play crucial roles in shaping the future of project delivery for high-performance buildings.

Zorana PETOJEVIĆ is an Assis-

tant Professor at the University of Belgrade, Faculty of Civil Engineering Department of Construction Project Management. In addition to her role at the University of Belgrade, she also serves as a researcher at the Zürich University of Applied Science, specifically in the School of Architecture, Design, and Civil Engineering. She is a recognised expert in energy efficiency in buildings and circular economy in the construction industry through her extensive research efforts and publication of scientific papers. Zorana's primary focus revolves around data-driven modelling of thermal systems in buildings, strategic approaches to building renovation and examining project delivery methods aimed at constructing high-performance buildings. As a consultant, she has actively contributed to noteworthy projects. offering various consultancy services such as investment project management, construction management, and contract and claim management.



Earthquake effects on structures and innovative systems for earthquake protection

This lecture provides an overview of earthquakes, their causes, and the physical processes involved in seismic activity. It highlights the need for proactive measures to mitigate seismic hazards and protect both existing and future structures, and offers a comprehensive examination of innovative earthquake protection systems. These systems encompass a wide range of techniques, including passive, active, and hybrid solutions, which have been developed to minimize structural damage and improve the safety of buildings and infrastructure. The lecture emphasises the importance of research, collaboration, and innovation in driving the development of these earthquake protection systems. It showcases successful case studies and ongoing research projects that demonstrate the potential for significant advancements in seismic safety and resilience.





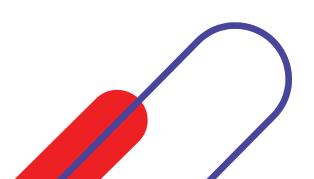
Marko MARINKOVIĆ, is an Assistant Professor at the University of Belgrade, Faculty of Civil Engineering and president of the Learning from Earthquakes Committee of the Serbian Association of Earthquake Engineering. His field of scientific and professional work is related to the seismic analysis of structures, both reinforced concrete and masonry. as well as steel structures. He is also a member of the CEN/TC 250 working body team /SC8/TG3 established by the European Commission with the task of preparing new Eurocodes. He participated in several European research projects and three shaking-table tests investigating full scale structures under earthquake excitation. His work on projects in industry is related to the seismic design and assessment of buildings. He published more than 40 papers in international journals and conferences.

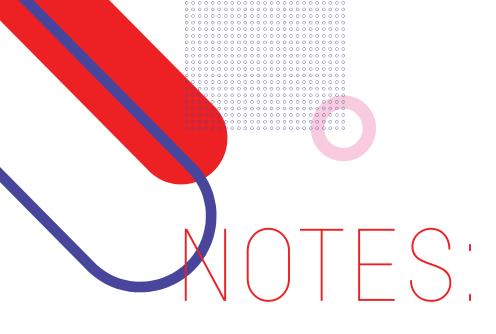
Nenad SIMIĆ, is the founder and CEO of HyperFacade. While studying architecture, he won the Yourope Award for the EU Embassy in Beijing project and the International Federation for Housing and Planning - IFHP Award in Göteborg. As one of the winners of the Sudapan Competition, he took part in the research and residency program at the IAAC (Institute for Advanced Architecture of Catalonia), with a focus on urbanism. He holds a Master of Architecture (M.Arch.) from the University of Belgrade. He designed and built several dozen of high-end residential and commercial buildings and interiors across Europe and the Middle East. His architectural projects were exhibited at La Biennale di Venezia, Storefront New York, Milan Design Week, Marava Art Centre UAE. G2E Las Vegas, the European Parliament in Brussels, etc.



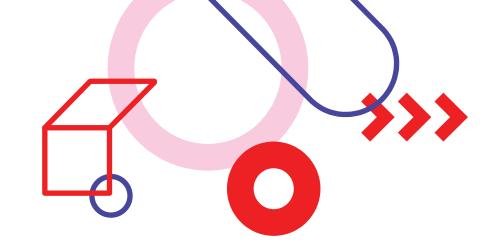
HYPER FAÇADE innovative façade design solutions

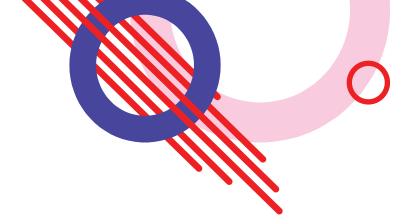
Using the latest technology, HyperFacade's mission is to fully integrate all stages of the building envelope's life cycle: from the initial design, through system development, production documentation, fabrication, and assembly, to construction and maintenance management. As a result, a full digital replica, HyperFacade, serves as one central model, providing not only multiple coherent outputs during the construction phase but also multiple valuable inputs through a real-time link with the real-world physical envelope once it is built, adding numerous benefits to facility management. These two facades, real and virtual, are interactively connected and act as one mixed-reality system, providing numerous benefits to developers, architects, manufacturers, contractors, and end-users.











STUDENTS

ESTP - ÉCOLE SPÉCIALE DES TRAVAUX PUBLICS

Dorian BEAUVALLET Oriane CHAMAND Guillaume COQUILLE Margot COSTE Constance DURIEZ Mathias GRAVE Lisa LAFFARGUE Mathieu LECERF Mathilde LECUILLER Kyle LEVY-VALENSI Mathieu MIKOU Raphael SALTEL Laura SCHREVER Roxane TILMANT-TATISCHEFF Clément SIDER

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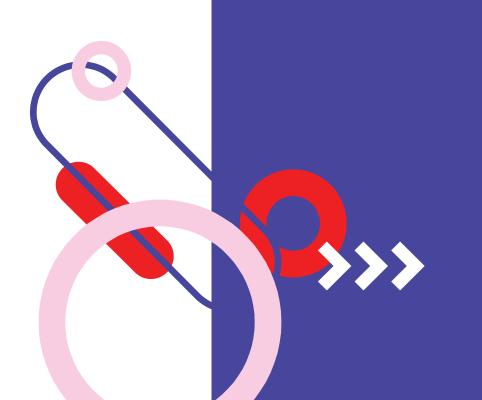
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