**02 #Подаци о Катедрама Одсека за ТМП (наставници и сарадници)**

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| **Chair** |
| Chair of Chemical and Mechanical Wood Processing |
| **Head of Chair** |
| Prof. Dr. Milanka Điporović-Momčilović |
| **Chair Development** |
| The Chair of Chemical and Mechanical Wood Processing was founded in 1956 known as the Chair of Chemical Forest Technology within the former Wood-industrial Department and nowadays the Department of TMP. The founder of the Chair was distinguished professor Siniša Stanković. At that time, 6 subjects were taught at the Chair of Chemical Forest Technology: Chemistry, Analytical Chemistry, Forest chemical technology, Technology of auxiliary materials, Chemical technology and Technology wood fiber masses.  From 1958 to 1960, the Chair was divided into the Chair of Wood Chemistry and the Chair of Forest Chemical Technology, carrying out four-year education at 5 departments: the Department of Forestry, the Department of Residential Greening, the Department of floods and erosion, the Department of mechanical wood processing and the Department of chemical wood processing. A total of 9 subjects were taught at the Chair of Forest Technology: Technology of auxiliary materials, Chemical technology of wood, Technology of wood fiber masses, Technology of wood-plastic masses, Technological Operations, Chemical wood processing of Wood pulp technology, General chemical technologies and Impregnation of wood), and the Chair of Wood Chemistry was engaged in the teaching of 6 subjects (Chemistry, Chemistry I, Chemistry II (selected chapters), Physical Chemistry, Analytical Chemistry and Wood chemistry).  In line with the restructuring of the University in 1963, part of the teaching of the Department of chemical processing was transferred to the Faculty of Technology, and accordingly in 1964, professor Siniša Stanković and teaching assistant Ljiljana Majdanac transfered to that faculty leaving the Chair of the Faculty of Forestry. Since then, subjects of the two listed chairs have been compiled to the Chair of CMWP. So, since 1966 this chair has been teaching classes at the undergraduate level in 4 subjects (Chemistry, Materials Science, Chipboards, fiberboards and wood-plastic masses and Wood chemistry with the fundamentals of chemical processing).  In the first years of the Faculty of Forestry many prominent professors of the University of Belgrade participated in the execution and development of the subjects Chemical technologies, Chemistry and Materials science. We should particularly mention prof. Dr. Siniša Stanković, prof. Dr. Dobrila Karapandžić, prof. Dr. Radomir Senić, prof. Dr. Natalija Jovanović, prof. Dr. Nada Marković and then young associates prof. Dr. Ljiljana Majdanac, prof. Dr. Nada Teržan, prof. Dr. Vukosava Pjević and graduate. eng. Desimir Filipović. Later, during the 70s, the Chair staff was joined by future productive and successful teachers, prof. Dr. Jovan Miljković and Prof. Dr. Tatjana Stefanović-Janežić, as engineers of Technology and Metallurgy.  During the 80s , Dr. Olga Crnogorac, assistant professor and professor Dr. Milanka Điporović-Momcilović, then wood processing engineers joined the Chair, as well as Dr. Biljana Bujanović and Jasna Martinović, engineers of the Faculty of Technology and Metallurgy, and Dr. Dragan Kosić, a chemical engineer. At the end of the 90s Associate Professor Dr. Ivana Gavrilović-Grmuša and Assistant Professor Dr. Mlađan Popović joined the Chair as wood processing engineers together with Ljiljana Čučković and MSc Ljiljana Suručić as chemical engineers. In the same period, the Chair was left by several distinguished teachers. Prof. Dr. Tatjana Stefanović-Janežić left to the Laval University in Canada; Dr. Olga Crnogorac also emigrated to Canada to work as a furniture designer in the Tesco Corporation; Dr. Biljana Bujanović, associate professor, went to the USA to the SUNY College of Environmental Science and Forestry (Syracuse): Department of Paper and Bioprocess Engineering. |
| **Chair members** |
| 1. Dr. Điporović-Momčilović R. Milanka – Full Professor (Head of Chair)  2. Dr. Ivana LJ. Gavrilović-Grmuša – Associate Professor  3. Dr. Mlađan M. Popović – Assistant Professor  4. Dr. Milica P. Rančić – Assistant Professor  5. Dr. Jasmina J. Popović – Assistant Professor  6. MSc Ivana Stojiljković – Teaching Assistant  7. MSc Gordana, D. Petrović ‒ Professional Associate, Chair Secretary  8. Grad.eng. Ljiljana V. Đurković ‒ Professional Associate  9. Mirjana Nećak – Technical Cooperate |
| **Chair subjects** |
| **Undergraduate studies**  *Compulsory subjects*  Chemistry  Wood chemistry  Materials science  Chipboards, fiberboards and wood-plastic masses  *Elective subjects*  Composite wood products  Chemical wood processing,  Тheoretical fundamentals of wood adhesion  Ecology in wood industry  **Master studies**  Modification of wood by chemical methods  Nanotechnologies in wood processing  Technologies of liquid biofuels production  Products of wood extraction and destilation  Theory of adhesion of composites and chipped wood  Modeling of properties of chipped wood composites  Interaction between processed and tool materials in wood processing  Specifics of machine processing of solid wood and wood based composites  **Doctoral studies**  Wood chemistry 2  Wood based boards and composites  Adhesive systems in wood processing  Characterization of chemical components of microscopic and submicroscopic elements of wood tissue  Characterization of products of wood extraction and destilation  Biorafination of lignocellulose materials  Interaction between processed and tool materials in wood processing |
| **Selected student papers / final papers/ master papers / dissertations/ field training** |
| **Doctoral dissertations:**  2015: Popović, Jasmina. Efekti nekih predtretmana na hemijski sastav juvenilnog i zrelog drveta poljskog jasena (Fraxinus angustofolia Vahl.ssp.Pannonica Soo & Simon) i mogućnosti primene tako modifikovanog drveta.  2012: Popović, Mlađan. Očvršćavanje urea-formaldehidnog adheziva za ploče iverice u prisustvu nekih domaćih drvnih vrsta.  2010: Gavrilović-Grmuša, Ivana. Penetracija urea-formaldehidnih adheziva različitih molarnih masa u tkivo nekih domaćih vrsta drveta.  2001: Điporović, Milanka. Uticaj vezivanja lignoceluloznih vlakana i termoplastične matrice na svojstva kompozita.  1999: Bujanović, Biljana. Izolovanje i krakterisanje lignina drveta i lignina sulfatne pulpe nekih lišćara.  1992: Crnogorac, Olga. Istraživanje mogućnosti smanjenja emisije slobodnog formaldehida iz drvnih ploča.  1984: Pavlović, Borivoje. Proizvodnja furfurala iz drvnih otpadaka i njegovo korišćenje kao veziva za dobijanje drvnih ploča.  1983: Stevanović-Janežić, Tatjana. Struktura i reakciona sposobnost lignina nekih domaćih vrsta drveta (Picea excelsa i Fagus moesiaca).  1981: Miljković, Jovan. Uticaj niskoviskoznog furfuril alkoholnog veziva na svojstva drvno-vlaknastih ploča dobijenih mokrim postupkom.  1979: Teržan, Nada. Studija hemijskog sastava domaćih vrsta hrasta (Quercus sessilis i Quercus pedunculata).  **Master of Science theses:**  2014: Petrović, Gordana. Ispitivanje hemijskih svojstava drveta i biološke aktivnosti ekstraktiva kore bele jove (Alnus incana (L.) Moench) sa područja Kopaonika.  2006: Popović, Mlađan. Uticaj nekih fizičkih i mehaničkih svojstava OSB i konvencionalne ploče iverice na ivično držanje vijaka.  2002: Grmuša, Ivana. Uticaj vatrootpornih sredstava na svojstva furnira i furnirskih ploča od bukve i topole.  1990: Điporović, Milanka. Neka svojstva ploča iverica na bazi acetilovanog iverja.  1987: Crnogorac, Olga. Uporedno određivanje slobodnog formaldehida u ivericama različite starosti.  **Master papers:**  2016: Drpić, Aleksandar.Uticaj predtretmana iverja vodom na svojstva ploča iverica.  2016: Todorović, Tijana.Uticaj dodatka nano čestica SiO₂ na karakteristikeurea-formaldehidnog adheziva i mogućnost njegoveprimene u proizvodnji ploča iverica.  2014. Perišić, Vladimir.Uticaj relativne vlažnosti vazduha na fizička i mehanička svojstva različitih tipova kompozitnih ploča od usitnjenog drveta.  2014: Karović, Nemanja. Varijabilnost hemijskog sastava drveta taksodijuma (Taxodiumdistichum (L.) Rich) sa područja Velikog ratnog ostrva.  2013: Ćosović, Bojan. Uticaj blago alkalnog i blago kiselog tretmana na dimenzionalnu stabilnost drveta poljskog jasena (Fraxinus angustifolia Vahl. ssp. Pannonica Soo & Simon).  **Final papers – undergraduate studies:**  2016: PETROVIĆ, Milan. Problem emisije formaldehida iz ploča na bazi drveta proizvedenih primenom urea-formaldehidnih adheziva ‒ trendovi u XXII veku.  2014: TODOROVIĆ, Tijana. Analiza sadržaja slobodnog formaldehida u pločama ivericama perforator metodom i metodom posude.  2014: DRPIĆ, Aleksandar. Analiza vatrootpornosti drvno-plastičnih kompozitnih materijala.  2012: BRKOVIĆ, Ivan. Istraživanje debljinskog profila zatezne čvrstoće komercijalne ploče iverice.  2010: STOKUĆA, Milan.Uticaj razmaka oslonaca na savojnu čvrstoću i modul elastičnosti QSB ploče iverice novijeg tipa i standardne OSB ploče.  2009: MITROVIĆ, Milica. Analiza tipova kompozitnih ploča i elemenata na bazi drveta, uvezenih u državnu zajednicu Srbije i Crne Gore 2003‒2006. godine i Republiku Srbiju u 2007. godini.  2008: BAJIĆ, Darko. Uticaj dubine prdebušenje vijčanog otvora na jačinu držanja vijka u ploči iverici.  2008: MILJKOVIĆ,Aleksandar. Uporedna analiza strukture i površine oplemenjenih ploča iverice.  2008: SAVKOVIĆ, Marko. Neka svojstva laminatnih podova na tržištu Srbije.  2008: LUIĆ, Marija. Uporedna analiza metoda SRPS D.C8.104 i EN317 standarda za određivanje debljinskog bubrenja i upijanja vode ploča iverice.  2007: VUKOVIĆ, Zoran. Uporedno ispitivanje nekih svojstava i otpornosti na eksterijerne uslove OSB i furnirskih ploča.  2003: ŽIVKOVIĆ, Goran. Karakteristike nekih kompozitnih ploča i elemenata od drveta značajne za njihovu primenu.  2002: KULEZIĆ,Gordana. Neke mogućnosti u kreiranju svojstava polipropilenskog kompozita sa drvnim česticama.  2001: LEKIĆ, Aleksandar. Ispitivanje određenih svojstava oplemenjenih ploča iverica iz uvoza.  1998: CRNOKRAK, Jasminka. Stanje krajem milenijuma i perspektive razvoja industrije ploča iverica u Srbiji i Jugoslaviji.  1997. ANTONIJEVIĆ, Jovan. Određivanje koncentracije formadelhida u vodenom rastvoru kolorimetrijskom metodom.  1996: POPOVIĆ, Mlađan. Određivanje sadržaja suve supstance urea-formadelhidnog lepka metodom refraktometrije.  1996: STEFANOVIĆ, Branko. Analiza natresanja iverastog tepiha u proizvodnji ploče iverice.  1986: NEDIĆ, Tomislav. Uticaj drvne vrste i primenjenog mineralnog veziva na neka svojstva ploča tipa „DURISOL”‑a.  1985: MILIĆ, Slađana. Kvantitativna analiza monosaharida iz hidrolizata euroameričke plantažne topole Populus robusta metodom tečne hromatografije visokog učinka.  1985: KOSTIĆ, Vukić. Primena ploča iverica u zidnim elementima montažnih kuća.  1984: SIMIĆ, Zoran. Ispitivanje mogućnosti VF predgrevanja iverastog tepiha i njegov uticaj na vrelo presovanje.  1982: MIĆOVIĆ, Miroslav. Uporedna ispitivanja zapreminskih i površinskih masa standardnih ploča iverica i odgovarajućih MDF ploča.  1980: ILIĆ, Miro. Iskorišćavanje kore ‒ važan zadatak u okviru kompleksnog iskorišćavanja drvne sirovine.  1979: MARSENIĆ, Sava. Apsorpcija vode, bubrenje i savojna čvrstoća vlaknaste ploče u zavisnosti od dodatka fenolne smole pri određenim (pH=4,5) i različitim vrednostima pH.  1976: ČOVIĆ, Bono. Uticaj vlage drvne sirovine na vreme vezivanja cementa.  1976: PETROVIĆ, Zoran : Zavisnost između sadržaja vlage u sirovoj i polusirovoj ploči i fizičko-mehaničkih svojstava polutvrdih drvno-vlaknastih ploča dobijeih mokro-suvim postupkom.  1976: ŽIVKOVIĆ, Zoran. Promene svojstava bukove rezane građe pri hidrotermičkoj obradi u autoklavu.  1975: JOJIĆ, Miroslava: Zavisnost između sadržaja vlage u sirovoj i polusirovoj ploči i režima vrelog presovanja injihov uticaj na fizičko-mehanička svojstava polutvrdih drvno-vlaknastih ploča izradjenih mokro‑suvim postupkom.  1974: LUKIĆ, Tomislav. Dobijanje celuloze po sulfatnom postupku na bazi četinarskih vrsta drveća.  1974: VUKAŠINOVIĆ, Panta. Promene svojstva bukovog drveta pri hidrotermičkoj obradi.  1974: RABIČ, Slobodan. Uticaj temperature hidrotermičke obrade na svojstva tvrdih drvno-vlaknastih ploča.  1974: LUKOVIĆ, Slobodan. Uticaj vrste drveta na fizičko-mehanička svojstva tvrdih drvno-vlaknastih ploča.  1974: MARJANOVIĆ, Vera. Uticaj režima ceđenja i vrelog presovanja na fizičko-mehanička svojstava polutvrdog lesonita.  1962: ĐORĐEVIĆ, Novica. Fizičko-hemijske osobine terpentinskog ulja. |
| **Research/ Projects** |
| Subproject with the topic „Development of wood plastic composites” within the scientific and research project: BTN-361005A/ (2005-2007) „ The development of new products in the aim of better utilization of wood raw material and improvement of wood processing export”. Topic leader: Dr. Milanka Điporović-Momčilović. |
| **Centers/ Laboratories** |
| **Laboratory for the testing of chipboards**  The Laboratory for the testing of chipboards is located at the Faculty of Forestry in Belgrade and accredited for the testing of physical, mechanical and chemical properties of chipboards, fiberboards and oriented strand boards (OSB). The head of the laboratory is prof. Dr. Milanka Điporović-Momčilović.  The Laboratory for chipboards, fiberboards and wood-plastic masses was established at the Chair of chemical and mechanical wood processing following the development trends in the industry and market of wood-based panels in Yugoslavia. It became a laboratory authorized by the Federal Standardization Bureau in 1980. Under the leadership of prof. Dr. Jovan Miljković this laboratory was ready for the period of the 80s and the escalation of the problem of formaldehyde emissions from wood-based panels. The Laboratory was equipped with apparatuses for the testing of formaldehyde content by the perforator method, and it adopted the method of testing of formaldehyde emissions by the WKI method. In addition, the Laboratory made apparatuses for domestic factories of chipboards and plywood, completed them with the necessary accessories, reactive substances and provided instruction to the factory trained personnel on how to conduct testing and monitoring of formaldehyde emissions from their products. Until the end of the 90s this laboratory was one of the only two centers in Yugoslavia which provided services of examination of the content of formaldehyde and its emission from wood-based panels.  After 2000, the Laboratory changed its name to the Laboratory for the testing of chipboards, which received its first decision on accreditation by the Accreditation Body of Serbia and Montenegro in 2003. In the period from 1995 to 2010, the laboratory was supplied with computer equipment and it renewed and modernized its inventory of laboratory measuring devices. During 2014 and 2015 the Laboratory further improved its section for the testing of formaldehyde content by the perforator method, and special laboratory unit was formed for making experimental wood-based panels.  The employees in the management of the Laboratory are members of the Commission for wood-based panels of the Standardization Institute of the Republic of Serbia, where their professional work was involved in the harmonization of national and international ISO standards. In recent years they have been actively working on the translation and taking over of the European (EN) standards in this area. |