



## Program predstavitev raziskovalnega dela študentov doktorskega študija Kemijske znanosti

V doktorskem študijskem programu Kemijske znanosti morajo študenti za napredovanje v drugi letnik uspešno opraviti predstavitev raziskovalnih izhodišč za doktorsko disertacijo pred komisijo, ki jo sestavljajo člani Komisije za doktorski študij iz vrst visokošolskih učiteljev. Letošnje predstavitve bodo **v torek, 10. 9. in sredo, 11. 9. 2024 v predavalnici 1, 1. nadstropje, Večna pot 113**, po spodaj objavljenem programu.

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### TOREK, 10. 9.

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- 9:00 – **TINA LOGONDER** (mentor doc. dr. Aljaž Gaber)  
Strukturna in funkcijska karakterizacija proteinskega kompleksa EpIC-FHL2- $\beta$ -katenin
- 9:20 – **ANA ATANASKOVIĆ** (mentor znan. sod. dr. Vojč Kocman)  
Structural characterization of let-7-f1 miRNA and its Interactions with lin28 protein
- 9:40 – **SARBANI MISHRA** (mentor znan. sod. dr. Vojč Kocman)  
Progress in deciphering the structure of mt-tRNA<sup>ILE</sup> and its fragment (ILE2)
- 10:00 – **ANŽE JENKO** (mentor doc. dr. Martin Gazvoda)  
Razvoj rekombinantnih in sinteznih metod za selektivno uvedbo nenaravnih fragmentov v peptide in proteine
- 10:20 – **DOMEN GOSTE** (mentor doc. dr. Bojan Šarac)  
Interakcije vode s funkcionaliziranimi 1,3-dialkilimidazolijevimi ionskimi tekočinami
- 10:40 – **ZALA ŠTEFANIČ** (mentorica prof. dr. Barbara Hribar Lee)  
Hidratacija peptidov in proteinov v prisotnosti sotopljenec

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### 11:00 – 11:20 ODMOR

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- 11:20 – **ŠPELA POK** (mentorica prof. dr. Irena Kralj Cigić)  
Molekulska karakterizacija površine zgodovinskih polimernih materialov z DESI-TOF
- 11:40 – **RANDA MOHAMED EBIED DERAZ** (mentor prof. dr. Matija Strlič)  
Life Cycle Assessment (LCA) for Preventive Conservation of Historic Paper during Storage
- 12:00 – **IVAN KONJEVIĆ** (mentor znan. svet. dr. Samo Hočevar)  
A novel electrochemical approach for the study of surface-active substances and their influence on particle dynamics
- 12:20 – **MOHANRAJ SADASIVAM** (mentor znan. svet. dr. Samo Hočevar)

**Electrochemical sensors for the detection of autoimmune disease biomarkers**

- 12:40 – **ŽAFRAN MARCEL** (mentor znan. sod. dr. Alen Albreht)  
**Merjenje celične viabilnosti in antioksidativnih lastnosti ekstraktov žlezave nedotike (*Impatiens glandulifera* Royle)**

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**13:00 – 14:00 ODMOR**

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- 14:00 – **MARKO BOŽINOVIĆ** (mentorica prof. dr. Polona Žnidaršič Plazl)  
**Intensification of selected biocatalytic processes for valorization of bio-based materials**
- 14:20 – **LENNART DREISEWERD** (mentor znan. sod. dr. Matej Huš)  
**Machine Learning Guided Prediction of Catalyst Properties and Performances**
- 14:40 – **YASMEEN IQBAL** (mentor znan. sod. dr. Matej Huš)  
**Atomistic Modelling of Selective Methane Oxidation on MOFs**
- 15:00 – **BAHADOR KAZEMI** (mentor izr. prof. dr. Blaž Likozar, somentor znan. sod. dr. Matej Huš)  
**Computational Design and Optimization of Metal-Organic Frameworks for Direct oxidation Methane-to-Methanol Catalysis**
- 15:20 – **VOJTĚCH ŠKOPEK** (mentor doc. dr. Ilja Gasan Osojnik Črnivec)  
**Biopolymer coatings for bubble detachment in electrolysis**
- 15:40 – **TIMOFEY KARNAUKHOV** (mentor znan. sod. dr. Andrii Kostyniuk)  
**Direct conversion of CO<sub>2</sub> to value-added products over bifunctional heterogeneous catalysts in a continuous flow reactor**
- 16:00 – **JAKOV-STJEPAN PAVELIĆ** (mentor znan. sod. dr. Miha Grilc (KI), somentor doc. dr. Sašo Gyergyek)  
**Magnetic heating effect in catalytic conversion of biomass-derived compounds**

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**SREDA, 11. 9.**

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- 9:00 – **ANDRIJANA MAROJEVIĆ** (mentor znan. sod. dr. Jan Bitenc)  
**Fluorinated alkoxyaluminate-based electrolytes for magnesium batteries**
- 9:20 – **MARIS MINNA MATHEW** (mentor izr. prof. dr. Boštjan Genorio, somentor znan. svet. dr. Dušan Strmčnik)  
**Advanced nickel-based electrocatalysts for energy storage and conversion**
- 9:40 – **VLADYSLAV YATSENKO** (mentor znan. sod. dr. Klemen Pirnat)  
**Organic cathode materials in Zn- and Li-ion batteries**
- 10:00 – **AMINA PAŠOVIĆ** (mentor prof. dr. Robert Dominko)

**Application of printed sensors for Li-ion batteries**

- 10:20 – **CHENGYU WANG** (mentor prof. dr. Robert Dominko)  
**Preparation and Characterization of Thick Electrodes for Li-ion Batteries by Phase Inversion**
- 10:40 – **ERVIN REMS** (mentorica znan. sod. dr. Anja Kopač Lautar)  
**Atomistično modeliranje elektrolitov in medfaznih stikov elektrolit-elektroda v sodobnih akumulatorjih**

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**11:00 – 11:20 ODMOR**

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- 11:20 – **MUHAMMAD ZAHID** (mentor viš. znan. sod. dr. Ivan Jerman)  
**Exploring metal energy carriers such as Aluminium for hydrogen and heat generation via steam reactions**
- 11:40 – **ANTE MATOŠIN** (mentor znan. svet. dr. Marjan Bele)  
**Studying the stability and activity of PtCo electrocatalysts for oxygen reduction reaction**
- 12:00 – **ERIK KOŠA** (mentorica znan. svet. dr. Ema Žagar)  
**Chemical recycling of polymer waste**
- 12:20 – **SUNČICA SRZENTIĆ** (mentorica znan. sod. dr. Filipa A. Vicente)  
**Extraction of high-value bioactive compounds from agri-food by-products using alternative solvents**
- 12:40 – **VERONIKA SYROVÁ** (mentor znan. sod. dr. David Pahovnik)  
**Synthesis of di-N-carboxyanhydrides cross-linkers**

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**13:00 – 14:00 ODMOR**

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- 14:00 – **ANA HERCEG** (mentor znan.sod.dr. Primož Jovanovič)  
**Modified Solid Electrolyte Interfaces for Electrochemical Ammonia Synthesis**
- 14:20 – **JURE JAKOŠ** (mentor doc. dr. Jakob Kljun)  
**Priprava izbranih cerulomicinov in novih kovinskih kompleksov**
- 14:40 – **NIMISHA KURUVANGATTU PUTHENVEETIL** (mentorica prof. dr. Nataša Novak Tušar, somentor znan. svet. dr. Albin Pintar)  
**Development of Multicomponent Photo-Fenton-Like Catalysts for Water Purification Under Visible Light**
- 15:00 – **ANN JINI MATHEWS** (mentorica prof. dr. Nataša Zabukovec Logar)  
**Development of (silico) aluminophosphates as thermal energy storage material**
- 15:20 – **DUŠAN FETIH** (mentorica prof. dr. Urška Šebenik)  
**Natural rubber latex nanocomposites for high performance elastomers**