|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Sunday 19.05.2024 | | | | | |
| SUN | 18:00-21:00 |  |  | *WELCOME RECEPTION & REGISTRATION* | [*H14 building, Wybrzeże Stanisława Wyspiańskiego 40 (near Boulevard of Rector Kulczyński)*](https://ambra.pwr.edu.pl/about/h14/) |
| *End of welcome day* | | | | | |
|  | | | | | |
| Monday 20.05.2024 | | | | | |
| MON | *9:00-10:00* |  |  | *REGISTRATION* | [*D20 building, ul. Janiszewskiego 8*](https://ambra.pwr.edu.pl/about/venue/) |
| MON | *10:00-10:20* |  |  | *OPENING CEREMONY* |  |
|  |  | S1 |  | Chair | [Michał Giersig](https://ambra.pwr.edu.pl/author/michael-giersig/) |
| MON | 10:20-11:00 | **PL1** | **40** | **Markus Antonietti** | [Natural polymers who can talk to microbes: Can this conversation make us carbon neutral?](https://ambra.pwr.edu.pl/publication/antonietti-2024/) |
| MON | 11:00-11:30 | I01 | 30 | Paul Mulvaney | [Single nanocrystal arrays for bio-applications](https://ambra.pwr.edu.pl/publication/mulvaney-2024/) |
| MON | 11:30-11:50 | O01 | 20 | Alexander Kirillov | [Antimicrobial coordination polymers: From self-assembly to biomaterials](https://ambra.pwr.edu.pl/publication/kirillov-2024/) |
| MON | *12:00-13:00* |  |  |  | *LUNCH* |
|  |  | S2 |  | Chair | [Wiesław Stręk](https://ambra.pwr.edu.pl/author/wies%C5%82aw-str%C4%99k/) |
| MON | 13:00-13:30 | I02 | 30 | Urszula Narkiewicz | [Advanced materials for photocatalytic carbon dioxide reduction and ammonia production](https://ambra.pwr.edu.pl/publication/narkiewicz-2024/) |
| MON | 13:30-13:50 | O02 | 20 | Vadim Kessler | [Polyoxometalates as molecular models for mineral nanoparticle – protein interactions](https://ambra.pwr.edu.pl/publication/kessler-2024/) |
| MON | 13:50-14:10 | O03 | 20 | Marek Godlewski | [ZnO-based nanoparticles for biomedical applications](https://ambra.pwr.edu.pl/publication/godlewski-2024/) |
| MON | 14:10-14:20 | SC01 | 10 | Weronika Bodylska | [New functional composite for the treatment of bacterial bone infection based on hydroxyapatite and titanium metal-organic framework](https://ambra.pwr.edu.pl/publication/bodylska-2024/) |
| MON | 14:20-14:30 | SC02 | 10 | Troy Breijaert | [Cellulose hybrid materials for wound dressing with delayed drug release properties](https://ambra.pwr.edu.pl/publication/breijaert-2024/) |
| MON | *14:30-15:00* |  |  |  | *COFFEE BREAK* |
|  |  | S3 |  | Chair | [Michael J. Naughton](https://ambra.pwr.edu.pl/author/michael-j.-naughton/) |
| MON | 15:00-15:30 | I03 | 30 | Kris Kempa | [Towards full control of bio-molecules with electromagnetic radiation](https://ambra.pwr.edu.pl/publication/kempa-2024/) |
| MON | 15:30-15:50 | O04 | 20 | Magdalena Osial | [Core-shell SPION-based nanostructures for biomedical and environ-mental applications](https://ambra.pwr.edu.pl/publication/osial-2024/) |
| MON | 15:50-16:10 | O05 | 20 | Marta Gordel-Wójcik | [Gold nanoshells decorated with silver sulfide quantum dots as novel nanoplatforms for theranostic applications](https://ambra.pwr.edu.pl/publication/gordel-wojcik-2024/) |
| MON | 16:10-16:30 | O06 | 20 | Njemuwa Nwaji | [Porous magnetic nanostructures for sensing SARS-CoV-2](https://ambra.pwr.edu.pl/publication/nwaji-2024/) |
| *End of 1st day* | | | | | |
|  | | | | | |
| Tuesday 21.05.2024 | | | | | |
|  |  | S4 |  | Chair | [Rafał J. Wiglusz](https://ambra.pwr.edu.pl/author/rafa%C5%82-j.-wiglusz/) |
| TUE | 9:30-10:10 | **PL2** | **40** | **Yadong Wang** | [Metallo-elastomers for biomedical applications](https://ambra.pwr.edu.pl/publication/wang-2024/) |
| TUE | 10:10-10:40 | I04 | 30 | Anna Nikodem | [Differential analysis of volumetric changes in multiphase materials using microtomography](https://ambra.pwr.edu.pl/publication/nikodem-2024/) |
| TUE | 10:40-11:00 | O07 | 20 | Łukasz John | [Functionalized silsesquioxanes with cage architecture as versatile building blocks in chemistry and biomaterials engineering](https://ambra.pwr.edu.pl/publication/john-2024/) |
| TUE | *11:00-11:30* |  |  |  | *COFFEE BREAK* |
|  |  | S5 |  | Chair | [Yadong Wang](https://ambra.pwr.edu.pl/author/yadong-wang/) |
| TUE | 11:30-12:00 | I05 | 30 | Ambra Giannetti | [Oligonucleotide switches for optical biosensing](https://ambra.pwr.edu.pl/publication/giannetti-2024/) |
| TUE | 12:00-12:20 | O08 | 20 | Yuri Strzhemechny | [Role of synthesis parameters in optoelectronic and antibacterial properties of microcrystalline β-Ga₂O₃ and GaO(OH)](https://ambra.pwr.edu.pl/publication/strzhemechny-2024/) |
| TUE | 12:20-12:40 | O09 | 20 | Imroi El-Habib | [Antibacterial activity of ZnO nanoparticles thin films](https://ambra.pwr.edu.pl/publication/el-habib-2024/) |
| TUE | 12:40-12:50 | SC03 | 10 | Paulina Piotrowska | [Development of biocompatible elastin-rich bioprosthetic material to overcome valve calcification](https://ambra.pwr.edu.pl/publication/piotrowska-2024/) |
| TUE | 12:50-13:00 | SC04 | 10 | Natalia Charczuk | [The influence of excitation wavelength on the emission of europium(III) ions in phosphate silicate hydroxyapatite](https://ambra.pwr.edu.pl/publication/charczuk-2024/) |
| TUE | *13:00-14:00* |  |  |  | *LUNCH* |
|  |  | S6 |  | Chair | [Paul Mulvaney](https://ambra.pwr.edu.pl/author/paul-mulvaney/) |
| TUE | 14:00-14:30 | I06 | 30 | Gulaim A Seisenbaeva | [Tailoring adsorbents and biocatalysts for sustainability challenges](https://ambra.pwr.edu.pl/publication/seisenbaeva-2024/) |
| TUE | 14:30-14:50 | O10 | 20 | Anna Gibas | [Photocatalytic and antibacterial properties of H₂O₂-sensitized TiO₂](https://ambra.pwr.edu.pl/publication/gibas-2024/) |
| TUE | 14:50-15:10 | O11 | 20 | Monika Stącel | [Influence of the type of thermoplastic recycled material on the rheological and mechanical properties of the plastic-based composites towards circular economy](https://ambra.pwr.edu.pl/publication/stacel-2024/) |
| TUE | 15:10-15:20 | SC05 | 10 | Filip Kozłowski | [Synthesis of Mn-doped TiO₂ nanoparticles](https://ambra.pwr.edu.pl/publication/kozlowski-2024/) |
| TUE | 15:20-15:30 | SC06 | 10 | Natalia Kaczmarczyk | [Application of sol-gel materials in bioenergy technology: sealing high-pressure hydrogen tanks](https://ambra.pwr.edu.pl/publication/kaczmarczyk-2024/) |
| TUE | 15:30-15:40 | SC07 | 10 | Patryk Fałat | [Spectroscopic characterization of NaYF₄: Tm³⁺/Pr³⁺ microcrys-tals showing concurrent emission in UV and NIR spectral ranges](https://ambra.pwr.edu.pl/publication/falat-2024/) |
| TUE | 15:40-17:00 | PS | 90 | POSTER SESSION | *WITH COFFEE & COOKIES* |
| TUE | *18:30* |  |  | *GALA DINNER* | [*Odra Centrum, Wybrzeże Juliusza Słowackiego 5B, 50-406 Wrocław (near Grunwaldzki Bridge)*](https://ambra.pwr.edu.pl/about/odra/) |
| *End of 2nd day* | | | | | |
| Wednesday 22.05.2024 | | | | | |
|  |  | S7 |  | Chair | [Vadim Kessler](https://ambra.pwr.edu.pl/author/vadim-kessler/) |
| WED | 9:30-10:10 | **PL3** | **40** | **Tadeusz Sarna** | [Tuning the formation of reactive oxygen species mediated by exogenous and endogenous photosensitizers for efficient photodynamic therapy of cancer and bacterial infections](https://ambra.pwr.edu.pl/publication/sarna-2024/) |
| WED | 10:10-10:40 | I07 | 30 | Claudine Kieda | [Glycobiology for cell targeting in hypoxia-dependent pathologic microenvironment](https://ambra.pwr.edu.pl/publication/kieda-2024/) |
| WED | 10:40-11:00 | O12 | 20 | Magdalena Łabowska | [Additive manufacturing of stimuli-responsive hydrogel pharmaceuticals for controlled drug delivery](https://ambra.pwr.edu.pl/publication/labowska-2024/) |
| WED | *11:00-11:30* |  |  |  | *COFFEE BREAK* |
|  |  | S8 |  | Chair | [Jarosław Myśliwiec](https://ambra.pwr.edu.pl/author/jaros%C5%82aw-my%C5%9Bliwiec/) |
| WED | 11:30-12:00 | I08 | 30 | Marcel Schubert | [Microscopic lasers as biointegrated sensors](https://ambra.pwr.edu.pl/publication/schubert-2024/) |
| WED | 12:00-12:20 | O13 | 20 | Adam Watras | [Structural and spectroscopic properties of Ca₁₋ₓSrₓF₂: Nd³⁺ nanocrystals](https://ambra.pwr.edu.pl/publication/watras-2024/) |
| WED | 12:20-12:40 | O14 | 20 | Walis Jones | [Exploiting the Full Potential of Surface Plasmon Resonance: Beyond Sensorgrams and Kinetics to Reflectance Spectra and Surface Layer Characterisation](https://ambra.pwr.edu.pl/publication/jones-2024/) |
| WED | 12:40-13:00 | O15 | 20 | José Ferreira | [Alkali-free-based bioactive glass compositions and devices for the most demanding applications in healthcare, bone regeneration & tissue engineering](https://ambra.pwr.edu.pl/publication/ferreira-2024/) |
| WED | *13:00-14:00* |  |  |  | *LUNCH* |
|  |  | S9 |  | Chair | [Claudine Kieda](https://ambra.pwr.edu.pl/author/claudine-kieda/) |
| WED | 14:00-14:30 | I9 | 30 | Michael J. Naughton | [Control of macrophages with piezoelectric nanoparticles](https://ambra.pwr.edu.pl/publication/naughton-2024/) |
| WED | 14:30-14:50 | O16 | 20 | Galyna Dovbeshko | [Interaction of carbon-containing nanoparticles of smoke with various types of pollutants during their simultaneous exposure: Physical chemical property and neurotoxicity](https://ambra.pwr.edu.pl/publication/dovbeshko-2024/) |
| WED | 14:50-15:10 | O17 | 20 | Beata Borak | [The influence of silica nanoparticles containing boron on growth of cucumber (*Cucumis sativus L.*)](https://ambra.pwr.edu.pl/publication/borak-2024/) |
| WED | 15:10-15:30 | O18 | 20 | Philip Kiełbowicz | [Assessment and development of a core-shell SPION-based targeted nanoparticle therapy for atherosclerosis treatment](https://ambra.pwr.edu.pl/publication/kielbowicz-2024-a/) |
| WED | *16:00-18:00* |  |  | *EXCURSION* |  |
| *End of 3rd day* | | | | | |
|  | | | | | |
| Thursday 23.05.2024 | | | | | |
|  |  | S10 |  | Moderator | [Michał Giersig](https://ambra.pwr.edu.pl/author/michael-giersig/) |
| THU | 10:00-11:30 |  |  | OPEN SESSION & DISCUSSION | Future forecasts for advanced materials in biomedicine and energy |
| THU | 11:30-13:00 |  |  | NETWORKING | *WITH COFFEE & COOKIES* |
| THU | *13:00-13:10* |  |  | *CLOSING CEREMONY* |  |