VII FORUM EMR – PL
25 – 28 June, 2024, Zielona Góra

UNIWERSYTET ZIELONOGÓRSKI

PG EMR

CONFERENCE PROGRAMME

25.06.2024, Tuesday **(Venue:** 4a Prof. Z. Szafrana Street, Building A-29**)**	
12:00 – 17:00	**REGISTRATION (1st floor, Hall near Aula 106)**
17:00 – 17:30	**OPENING CEREMONY (1st floor, Aula 106)** Chairwoman: **Dr hab. Maria Przybylska, Prof. UZ** (Zielona Góra), Chairwoman of the Local Organizing Committee (LOC) of the VII Forum EMR-PL; Welcome address: **Dr hab. Piotr Pietrzyk, Prof. UJ** (Kraków), Chairman of the Polish Electron Magnetic Resonance (EMR–PL) Group; **Prof. dr hab. Wojciech Strzyżewski** (Zielona Góra), JM Rector UZ, Honorary Patronage of the VII Forum EMR-PL; **Prof. dr hab. Andrzej Drzewiński** (Zielona Góra), Dean of the Faculty of Physics and Astronomy UZ; **Dr hab. Bohdan Padlyak, Prof. UZ** (Zielona Góra), Chairman of the Local Organizing Committee (LOC) of the VII Forum EMR-PL **COMMEMORATIVE GROUP PHOTOS**
17:30 – 19:30	**WELCOME RECEPTION (ground floor, cafeteria "Kuchnia u Macieja")**
26.06.2024, Wednesday **(Venue:** 4a Szafrana Str. Building A-29, 1st floor, Aula 106**)**	
8:30 – 9:00	**REGISTRATION (1st floor, Hall near Aula 106)**
1st Oral session, Chairman: Dr hab. Maciej Witwicki, Prof. UWr	
9:00 – 9:40	**C. Rudowicz**, L. Mollabashi, S. Jalali-Asadabadi, M. Acikgoz, Z. Ghasemi-Dorcheh, R. Ebrahimi-Jaberi, M. Jalali-Asadabad, S. Rahimi, F. Jalali-Asadabadi ***Interplay between spin Hamiltonian and crystal field Hamiltonian: DFT/ab initio and semiempirical modelling for Gd^{3+} ions in $PbTiO_3$ and Tm^{3+} ions in $LiTmF_4$*** **(Plenary Lecture 1)**
9:40 – 10:10	Maciej Marć , Wiktor W. Wolak, Andrzej Drzewiński, Stepan Mudry, Ihor Shtablavyi, **Miroslaw R. Dudek** ***Kittel's theory of ferromagnetic resonance for thin, flexible films with embedded magnetic nanostructures*** **(O-1)**
10:10 – 10:40	**Jacek Sawka**, Alina Bieńko, Anna Świtlcka, Roman Boča, Andrew Ozarowski ***The impact of linker ligands on the structure dimensionality, magnetic anisotropy and slow relaxation processes of six-coordinate Ni(II) complexes*** **(O-2)**
10:40 – 11:20	**Bohdan Padlyak**, Ihor Kindrat, Adam Drzewiecki, Ireneusz Stefaniuk ***EPR spectroscopy of the $Li_2B_4O_7$ glasses co-doped with transition (Cu, Mn) and rare-earth (Eu, Sm) elements (review)*** **(Plenary Lecture 2)**
11:20 – 11:50	**COFFEE BREAK (ground floor, cafeteria "Kuchnia u Macieja")**
2nd Oral session, Chairman: Dr hab. Piotr Pietrzyk, Prof. UJ	
11:50 – 12:30	**Maria Augustyniak-Jabłokow**, Roman Strzelczyk, Ryhor Fedaruk ***Methodology of EMR Investigations of the Graphene Related Carbon Materials*** **(Plenary Lecture 3)**
12:30 – 13:00	**Krzysztof Kruczała**, Radim Beranek, Szymon Wierzbicki ***Study of Catalytic Systems by Electron Paramagnetic Resonance Spectroscopy*** **(O-3)**
13:00 – 13:30	**Maciej Witwicki** ***Metal Cation Radical Complexes: From Environmental Pollutants to Functional Materials (O-4)***

13:30 – 15:00	**LUNCH (ground floor, cafeteria "Kuchnia u Macieja")**
3rd Oral session, Chairman: Dr hab. Ireneusz Stefaniuk, Prof. UR	
15:00 – 15:40	**Dana Dvoranová**, Zuzana Dyrčíková ***The cw-Electron Paramagnetic Resonance Spectroscopy in Heterogeneous Photocatalysis*** **(Plenary Lecture 4)**
15:40 – 16:10	Aneta Krasowska, Paweł Rejmak, **Piotr Pietrzyk** ***From dioxygen to superoxide – EPR study of paramagnetic Zn^{2+}-$O_2^{\bullet-}$ species in ZSM-5 zeolite and periodic DFT modelling*** **(O-5)**
16:10 – 16:40	**Kamila Sobańska**, Piotr Pietrzyk ***Identification of reactive oxygen species generated by the interaction of transition metal oxides and H_2O_2*** **(O-6)**
16:40 – 17:10	**General Meeting of the Polish EMR Group**
17:10 – 17:40	**COFFEE BREAK (ground floor, cafeteria "Kuchnia u Macieja")**
17:40 – 19:00	**POSTER SESSION, Chairman: Prof. dr hab. Mirosław Dudek** (1st floor, Hall near Aula 106) **(P-1)** **Zuzana Dyrčíková**, Miriama Malček Šimunková, Dana Dvoranová ***Photoinduced processes on modified titanium dioxide photocatalysts studied by indirect cw-EPR techniques*** **(P-2)** **Zuzanna Didjurgeit, Iga Sienkiewicz**, Adrianna Kędziora, Beata Kucharska, Bernadeta Dobosz ***Herbs with antioxidant and photosensitizing properties*** **(P-3)** **Vasyl Tataryn**, Bohdan Padlyak, Oleksiy Tataryn ***System of digital scanning of the magnetic field for radiospectrometers of the "RADIOPAN" company (Poznań, Poland)*** **(P-4)** Kacper Kut, Bogumił Cieniek, Ireneusz Stefaniuk, Grzegorz Bartosz, **Izabela Sadowska-Bartosz** ***Effect of low concentrations of nitroxides on SH-SY5Y cells transfected with the Tau protein*** **(P-5)** **Łukasz Dubiel**, Antoni Żywczak, Andrzej Wal, Ireneusz Stefaniuk ***Electron magnetic resonance of Co-doped $BaTiO_3$ ceramics at helium temperatures*** **(P-6)** **Bogumił Cieniek**, Ireneusz Stefaniuk, Magdalena Kulpa-Greszta, Anna Tomaszewska, Robert Pązik ***EMR study of spinel multi-shell $CoFe_2O_4$ nanoferrites*** **(P-7)** **Ihor Kindrat**, Bohdan Padlyak, Adam Drzewiecki, Volodymyr Adamiv, Ihor Teslyuk, Bogumił Cieniek, Ireneusz Stefaniuk ***EPR and optical spectroscopy of lithium tetraborate glasses doped with Tb and co-doped with Tb and Ag*** **(P-8)** **Iwona Rogalska**, Bogumił Cieniek, **Ireneusz Stefaniuk**, Marta Ruszała, Jakub Grendysa, Anna Juś ***Properties of $Cd_{1-x}Mn_xTe$ as a room temperature semiconductor radiation detector*** **(P-9)** **Danuta Piwowarska**, Niko Guskos, Konstantinos Aidinis, Ewelina Kusiak-Nejman, Agnieszka Wanag, Antoni W. Morawski ***Temperature dependence of EPR spectra in titanium dioxide modified with (3-aminopropyl) triethoxysilane (APTES)*** **(P10)** T. Jasiński, M. Drąg, **M. Kuzma** ***Spin qubit pairs in DNA Hairpins – EPR methods of study***
27.06.2024, Thursday **(Venue:** 4a Szafrana Str. Building A-29, 1st floor, Aula 106**)**	
4th Oral session, Chairman: Prof. dr hab. Czeslaw Rudowicz, UAM	
9:00 – 9:20	**Zbigniew Sojka** ***In Memory of Professor Krystyna Dyrek*** **(Invited Lecture)**
9:20 – 10:00	**Zbigniew Sojka** ***EPR and DFT Investigations into Reactive Oxygen Species Trapped on Surfaces and in Cages of Catalytic Relevance*** **(Plenary Lecture 5)**

10:00 – 10:30	**Krystian Mokrzyński**, Andrzej Żądło, Grzegorz Szewczyk, Michał Sarna, Theodore G. Camenisch, Shosuke Ito, Kazumasa Wakamatsu, Tadeusz Sarna ***The effect of oxidative degradation of Dopa-melanin on its basic physicochemical properties and photoreactivity* (O-7)**
10:30 – 11:00	**Katarzyna Zawada**, Katerina Makarova, Małgorzata Korzeniowska nee Wiweger ***Benchtop X-band EPR for in vivo studies of zebrafish - melanin radicals and nitroxyl spin probes* (O-8)**
11:00 – 11:30	**COFFEE BREAK (ground floor, cafeteria "Kuchnia u Macieja")**
5th Oral session, Chairman: Prof. Dr hab. Zbigniew Sojka, UJ	
11:30 – 12:10	**Alina Bieńko** ***Towards "better" molecular magnets. Correlation of structure and magnetic anisotropy* (Plenary Lecture 6)**
12:10 – 12:40	**Marian Kuzma**, M. Bester, B. Cieniek, V. Popowich, I. Stefaniuk ***Two-dimensional magnetism in a self-inercalated transition metal dichalcogenides* (O-9)**
12:40 – 13:30	**Free time before Conference excursion and Gala dinner**
13:30 – 15:00	**LUNCH (ground floor, cafeteria "Kuchnia u Macieja")**
15:00 – 18:00	**Bus and boat excursion to the "Winny Dworek" including tasting of local wines and cheeses**
18:00 – 20:00	**Conference Gala Dinner in the restaurant at "Winny Dworek"**
20:00 – 21:00	**Departure to Zielona Góra**
28.06.2024, Friday **(Venue:** 4a Szafrana Str. Building A-29, 1st floor, Aula 106**)**	
6th Oral session, Chairman: Dr hab. Bohdan Padlyak, Prof. UZ	
10:00 – 10:30	**Bernadeta Dobosz** ***Application of ESR spectroscopy in nanomedicine (O-10)***
10:30 – 11:00	**Ireneusz Stefaniuk**, Bogumił Cieniek, Agata Ćwik, Katarzyna Kluska, Idalia Kasprzyk ***EPR case study - tracking long-lived free radicals in dandelion caused by air pollution* (O-11)**
11:00 – 11:30	**COFFEE BREAK (ground floor, cafeteria "Kuchnia u Macieja")**
11:30 – 12:00	**CLOSING REMARKS AND CONCLUSION OF THE FORUM**
12:00 – 13:30	**LUNCH (ground floor, cafeteria "Kuchnia u Macieja")**

Categories & Duration of the presentations

1. **Plenary**: 40min (35 min + 5 min for discussion);
2. **Invited**: 40min (35 min + 5 min for discussion);
3. **Oral**: 30 min (25 min + 5 min for discussion).

NOTES:

* **Session Chairman are kindly requested to inform each presenter**:

– about 10 min before the end of presentation that there are "***10 min left including discussion***";

– about 5 min before the end of presentation that "***the remaining time should be devoted for discussion***".

*** Presenters are kindly requested to upload the file with your presentation into the conference computer before the start of a given session, unless you intend to use your own notebook.**