



HUMBOLDT KOLLEG 2023

RECENT ADVANCES IN INTERDISCIPLINARY MATERIAL SCIENCE: PERSPECTIVE FROM PHYSICS, CHEMISTRY AND BIOLOGY

NEUESTE FORTSCHRITTE IN DER INTERDISZIPLINÄREN MATERIALWISSENSCHAFT: PERSPEKTIVE AUS PHYSIK, CHEMIE UND BIOLOGIE

April 12-14, 2023, Ankara University, Ankara, Turkey

PROGRAMM / PROGRAMME

12 April 2023 (50. Yıl Salonu)	
09:00 – 09:30	Anmeldung / Registration
09:30 – 10:00	Eröffnung / Opening
	Begrüßungsworte / Opening Talks
	Prof. Dr. Handan OLĞAR Humboldt Ambassador Scientist for Turkey
	Luisa RATH Alexander von Humboldt Foundation, Regional Manager
	Prof. Dr. Necdet ÜNÜVAR Rector of Ankara University
	Prof. Dr. Hasan MANDAL President of TÜBİTAK
	Herr Jürgen SCHULZ German Ambassador for Turkey
Chairperson: Prof. Dr. Şinasi ELLİALTIOĞLU (TED University, Director of Basic Sciences Unit, Turkey)	

10:00 – 11:00	Prof. Dr. Ataç İMAMOĞLU (ETH Zürich, Department of Physics, Quantum Electronics Institute, Switzerland)	Magnetism in Moire Materials
11:00 – 11:30	Kaffeepause / Coffee Break	
Chairperson: Prof. Dr. Burç MISIRLIOĞLU (Sabancı University, Faculty of Engineering and Natural Sciences, Department of Materials Science and Engineering, Turkey)		
11:30 – 12:00	Prof. Dr. Özgür ÖKTEL (Bilkent University, Physics Department, Turkey)	Perpendicular Space Picture for Localized States in Quasicrystals
12:00 – 12:30	Prof. Dr. Lütfi ÖZYÜZER (İzmir Institute of Technology, Department of Physics, Turkey)	Large Area Transparent DMD Thin Film Electrodes Deposited by Magnetron Sputtering
12:30 – 13:00	Dr. Semih ENER (Darmstadt University of Technology, Functional Materials, Department of Material Science, Germany)	Hard Magnetic Materials and Recent Advances on Materials Development
13:00 – 14:30	Mittagessen / Lunch	
Chairperson: Prof. Dr. Melek YAMAN (Hacettepe University, Faculty of Education, Department of Biology Education, Turkey)		
14:30 – 15:00	Prof. Dr. Ender SUVACI (Eskisehir Technical University, Department of Materials Science and Engineering, Turkey)	MicNo®: New Generation Particle Technology to Improve Lives
15:00 – 15:30	Prof. Dr. Wolfhard JANKE (Leipzig University, Theoretical Physics Institute, Germany)	Critical Behavior of the 3D Ising Model with Power-Law Correlated Defects: Monte Carlo Simulations
15:30-16:00	Kaffeepause / Coffee Break	
Chairperson: Prof. Dr. Murat MANGUOĞLU (Middle East Technical University, Faculty of Engineering, Department of Computer Engineering, Turkey)		
16:00 – 16:30	Prof. Dr. Şefik SÜZER (Bilkent University, Department of Chemistry, Turkey)	Localized X-Ray Photoelectron Impedance Spectroscopy (LoXPIS) for Tapping into the Diffuse Charge Dynamics of Ionic Liquid Electrolytes within Energy Storage Devices
16:30 – 17:00	Prof. Dr. Serim İLDAY (Bilkent University, UNAM National Nanotechnology Research Center, Turkey)	How to Control Far from Equilibrium Self- Assembly of Atoms, Colloids, Microorganisms, and Cells: A Rough Guide
17:00 – 17:30	Kaffeepause / Coffee Break	
Chairperson: Prof. Dr. Ali SINAĞ (Ankara University, Department of Chemistry, Turkey)		
17:30 – 18:00	Assoc. Prof. Dr. Emre ERDEM (Sabancı University, Integrated Manufacturing Technologies Research and Application Center, Turkey)	Defect Controlled Electrodes for High Performance All-in-One Supercapacitors
18:00 – 18:30	Prof. Dr. Saim ÖZKAR (Middle East Technical University, Department of Chemistry, Turkey)	Catalytic Efficiency of Noble Metal Nanocatalysts in Hydrolytic Dehydrogenation of Ammonia Borane
19:30	Empfang / Reception	

13 April 2023 (100. Yıl Salonu)

9:30 – 10:00	Prof. Dr. Handan OLĞAR (Humboldt Ambassador Scientist, Ankara University, Department of Physics Engineering)	Opportunities of the Alexander von Humboldt Foundation for International Researchers
10:00 – 10:30	Murat KEMALOĞLU (DAAD IC İstanbul, Turkey)	Opportunities of the DAAD for International Junior Researchers
10:30 – 11:00	Kaffeepause / Coffee Break	
11:00 – 12:00	Diskussion Runder Tisch / Round Table Discussion	
	Deutsche–Türkische Zusammenarbeit in Wissenschaft / German- Turkish Cooperation in Science	
	Prof. Dr. Hasan MANDAL Humboldt Fellow, President of the Scientific and Technological Research Council of Turkey	
	Prof. Dr. Ayhan ELMALI Humboldt Fellow, Ankara University, Department of Physics Engineering	
11:00 – 12:00	Prof. Dr. Ece GÖZTEPE-ÇELEBİ Humboldt Fellow, Bilkent University, Dean of the Faculty of Law	
	Prof. Dr. Burhanettin Aykut ARIKAN Türkisch-Deutsche Universität, Dean of the Faculty of Cultural and Social Sciences, İstanbul, Turkey	
12:15 – 12:30	Conference Photo (in front of the building)	
13:00 – 14:00	Mittagessen / Lunch	
Chairperson: Prof. Dr. Kadir PEKMEZ (Hacettepe University, Department of Chemistry, Turkey)		
14:00 – 14:30	Dr. Stefan SCHNABEL (University of Leipzig, Institute of Theoretical Physics, Germany)	Long Lennard-Jones polymers at the Theta-point
14:30 – 15:00	Prof. Dr. Durmuş Ali DEMİR (Humboldt Awardee) (Sabancı University, Faculty of Engineering and Natural Sciences, Turkey)	Quantum Tunneling Time, with Applications to Point Mutations in DNA
15:00 – 15:30	Dr. Ezgi KARACA (Dokuz Eylül University, İzmir International Biomedicine and Genome Institute, Turkey)	Recent Advances in the Computational Structural Biology of Biomolecular Interactions
15:30 – 16:30	Poster Session (Approx. 15-20 poster presentations from Junior Researchers)	
	Kaffeepause / Coffee Break	
Chairperson: Prof. Dr. Hülya ALTUNTAŞ (Eskisehir Technical University, Department of Biology, Turkey)		
16:30-17:00	Dr. Yunus ALAPAN (Georgia Institute of Technology, U.S.A.)	Biohybrid And Synthetic Microrobots with Controlled Navigation in Biological Tissues
17:00 – 17:30	Prof. Dr. Ethem AKTÜRK (Adnan Menderes University, Faculty Of Science, Physics Department, Turkey)	Exotic Two-Dimensional Material: Biphenylene Network
17:30 – 18:00	Prof. Dr. Martin WEIGEL (University of Chemnitz, Department of Physics, Germany)	Magnetic Systems with Quenched Disorder: Results from (Quasi) Exact Ground State
19:30	Feierliches Konferenz Abendessen / Conference Dinner	

14 April 2023 (100. Yıl Salonu)

Chairperson: **Prof. Dr. Turgut BAŞTUĞ**

(Hacettepe University, Department of Biophysics, Faculty of Medicine, Turkey)

9:30 – 10:00	Dr. Sezin GALİOĞLU ÖZALTUĞ (Bilkent University, UNAM National Nanotechnology Research Center, Turkey)	Femtosecond Laser Synthesis of Nanoporous Materials
10:00 – 10:30	Prof. Dr. Raşit TURAN (Middle East Technical University, Center for Solar Energy Research and Applications (ODTÜ-GÜNAM), Turkey)	Current Status and Future Perspective of Photovoltaic Solar Cell Technologies
10:30 – 11:00	Prof. Dr. Ayşe KARAKEÇİLİ (Ankara University, Faculty of Engineering, Department of Chemical Engineering, Turkey)	NEW Biomaterials: Crossing Kingdoms
11:00 – 11:30	Kaffeepause / Coffee Break	
Chairperson: Prof. Dr. Emin AÇIKKALP (Eskisehir Technical University, Department of Mechanical Engineering)		
11:30 – 12:00	Prof. Dr. Nimet YILMAZ CANLI (Yıldız Technical University, Faculty of Arts and Sciences, Department of Physics, Turkey)	Liquid Crystals: Structure, Properties and Applications
12:00 – 12:30	Prof. Dr. Aslı İŞÇİ YAKAN (Ankara University, Faculty of Engineering, Department of Food Engineering, Department of Food Engineering, Turkey)	Biorenewable Resources and Biofuels
12:30 – 13:00	Prof. Dr. –Ing Markus K. LAKE (Hochschule Niederrhein, Fachbereich Maschinenbau und Verfahrenstechnik, Krefeld)	Design and Synthesis of PVD Coatings for AOP Process for Wastewater Treatment
13:00 – 13:30	Assoc. Prof. Işık SEMERCİ (Ankara University, Faculty of Engineering, Department of Energy Engineering, Turkey)	Ionic liquids and Biomass-Derived Solvents Paving the Way to A Bio-Circular Economy
13:30 – 13:45	Schlussitzung / Closing Session	
13:30 – 14:30	Mittagessen / Lunch	
14:30 – 17:30	Ausflug / Excursion	
	Besichtigung nach der Museum für Anatolische Civilisationen / Visit to The Museum of Anatolian Civilizations	
	Ankara Burg / Ankara Castle	
Ab / from 18:00	Ende der Ausflug und Abreise / End of the Excursion and Departure	

Allgemeine Hinweise / General Information

Konferenz Ort / Conference Venue

1st day : Ankara Üniversitesi, 50. Yıl Salonu, Tandoğan, Ankara

2nd and 3rd days : Ankara Üniversitesi, 100. Yıl Salonu, Tandoğan, Ankara

Kontakt / Contact

Handan OLĞAR, Humboldt Kolleg 2023 Ankara Organizer