



## **Results of the first admission to the Warsaw4PhD Doctoral School**

### **Candidates admitted to the School**

#### **The Nencki Institute of Experimental Biology of the Polish Academy of Sciences**

##### **1. Wit Magdalena**

Project 1.1. Determination of the impact of the ERK3/MK5 pathway on the development of cancer-associated cachexia [dr Grzegorz Sumara]

##### **2. Hawro Izabela**

Project 1.2. Investigation of the impact of Protein Kinase D family members on the development of metabolic diseases [dr Grzegorz Sumara]

##### **3. Dzwigońska Monika**

Project 1.3. Regulation of chromatin accessibility in the hypoxic tumour microenvironment of glioblastoma [prof. dr hab. Bożena Kamińska-Kaczmarek/dr Katarzyna Leszczyńska]

##### **4. Krakowczyk Magda**

Project 1.5. Cellular mechanisms handling failed mitochondrial protein translocation events [dr Piotr Brągoszewski]

##### **5. Borah Nabajyoti**

Project 1.5. Cellular mechanisms handling failed mitochondrial protein translocation events [dr Piotr Brągoszewski]



**6. Tse Wing-Sze**

Project 1.6. Protein depalmitoylation in the regulation of synaptic plasticity in neuropsychiatric diseases [prof. dr hab. Jakub Włodarczyk]

**7. Zaremba Dominika**

Project 1.7. Understanding patterns of emotional responses to climate change and their relation to mental health and climate action taking [dr hab. Artur Marchewka]

**8. Dehingia Bondita**

Project 1.9. Evolutionary genomics of astrocytes [dr Aleksandra Pękowska]

**9. Milewska Małgorzata**

Project 1.10. Spatiotemporal dynamics of interactions between DNA regulatory elements [dr Aleksandra Pękowska]

**10. Bryksa Anna**

Project 1.11. Activity of distinct neuronal populations of the prefrontal cortex in the development and maintenance of social bonds [dr hab. Ewelina Knapska]

**11. Taheri Pegah**

Project 1.12. Deciphering activity of CA1 region during alcohol seeking and consumption [dr hab. Katarzyna Radwańska]

**The Institute of Organic Chemistry of the Polish Academy of Sciences**

**12. Durka Jakub**

Project 2.1. Photocatalysis - Synthesis of ketones from amines and carboxylic acids [prof. Dorota Gryko]

**13. Wagner Jakub**

Project 2.3. Modular, polycyclic aromatic hydrocarbons (PAHs) based on cyclazines: new materials for optoelectronic applications [prof. Daniel Gryko/dr Marcin Lindner]

**14. Makkawi Ahmed**

Project 2.5. Design of highly selective catalysts guided by Artificial Intelligence  
[prof. dr Bartosz Grzybowski]

**15. Kęciek Aleksandra**

Project 2.6. Synthesis of supramolecular catalysts inspired by enzymes  
[prof. dr Bartosz Grzybowski]

**16. Biliği Yasemin**

Project 2.7. Self-organization of supramolecular catalysts inspired by enzymes  
[prof. dr Bartosz Grzybowski]

**17. Brześkiewicz Jakub**

Project 2.8. C–H Activation of nitrones with directing groups [dr hab. Rafał Loska]

**18. Tkaczyk Antoni**

Project 2.9. Transition metal-catalyzed C–H activation of nitrones [dr hab. Rafał Loska]

**19. Baczewska Paulina**

Project 2.10. New N-heterocyclic carbene gold complexes: from catalytic activity to medical applications [dr hab. Michał Michalak]

**20. Cieśla Piotr**

Project 2.11. Chemoenzymatic cascades of new Cu reactions of significant application potential [prof. dr hab. inż. Ryszard Józef Ostaszewski]

**21. Parul Parul**

Project 2.12. Chemoenzymatic cascades of new Pd reactions of significant application potential [prof. dr hab. inż. Ryszard Józef Ostaszewski]

**22. Prahi Shah**

Project 2.13. Regio- and stereocontrolled synthesis of olefins substituted with fluoromethyl groups [dr hab. Wojciech Chaładaj]

**23. Dolna Magdalena**

Project 2.15. Photochemical rearrangement of lactams: A ring-expansion approach towards structurally diverse heterocycles [prof. dr. hab. Bartłomiej Furman/dr Piotr Szcześniak]

**24. Kitti Szabo**

Project 2.16. Sustainable photochemical transformations of diazo reagents as a source of reactive intermediates [prof. dr hab. Dorota Gryko]

**The Institute of Physical Chemistry of the Polish Academy of Sciences****25. Corso Silva Cassia**

Project 3.1. High-speed multicolor Stimulated Raman Scattering microscopy based on widely-tunable all-fiber laser source [dr hab. Yuriy Stepanenko/dr inż. Katarzyna Krupa]

**26. Pielach Mateusz**

Project 3.2. High-power robust all-fiber laser source for fast multicolor Stimulated Raman Scattering microscopy [dr hab. Yuriy Stepanenko/dr inż. Katarzyna Krupa]

**27. Materska Joanna**

Project 3.3. Computer models of intracellular bacterial colonies [prof. Robert Holyst/dr Bartłomiej Waclaw]

**28. Sadłocha Aleksandra**

Project 3.4. Bacterial response to antibiotics in laboratory models of infections [prof. Piotr Garstecki/ dr Bartłomiej Waclaw]

**29. Mierzejewski Patryk**

Project 3.6. Modulation of stability of virions – development of bacteriophage stabilization methods [prof. dr hab. Robert Hołyst/ dr Jan Paczesny]

**30. Zbonikowski Rafał**

Project 3.7. Dynamic and responsive 2D systems [prof. dr hab. Robert Hołyst/ dr Jan Paczesny]

**31. Mukherjee Debjita**

Project 3.11. Artificial pancreatic islets: microfluidics-assisted reaggregation of endocrine cells inside hydrogel microcapsules [prof. dr hab. Piotr Garstecki/ dr Jan Guzowski]

**32. Siwiec Katarzyna**

Project 3.12. Photoproduction of hydrogen in biphasic systems with electron donor recycling [prof. dr hab. Marcin Opałło]

**33. Raza Sada Raza**

Project 3.13. Modulation of stability of virions – development of bacteriophage deactivation methods [prof. dr hab. Robert Hołyst/ dr Jan Paczesny]

**The Institute of Physics of the Polish Academy of Sciences****34. Olas Joanna**

Project 4.5. Optical imaging of single dye molecules in crystalline matrices [prof. dr hab. Bolesław Kozankiewicz]

**35. Alam MD Shahin**

Project 4.29. Thermoelectric phenomena in topological materials [dr hab. Marcin Matusiak]

**36. Mathew Juby**

Project 4.34. Spectroscopic studies of ZnMgO)O/Zn(Cd)O:Eu/ZnMgO quantum structures [Prof. Adrian Kozanecki/Dr hab. Ewa Przeździecka]

**37. Boban Honey**

Project 4.14. Precessional magnetization switching in ferromagnetic (Ga,Mn)N layers using sub-nanosecond short electric pulses [prof. dr hab. Maciej Sawicki/ dr Dariusz Sztenkiel]

**38. Kandari Rajni**

Project 4.30. Heat transport by topological excitations [dr hab. Marcin Matusiak]

**39. Grzączkowska Paulina**

Project 4.26. Thermodynamics of nanostructures at low temperatures [dr Maciej Zgirski/ prof. dr hab. Maciej Sawicki]

**40. Telezadehlari Mohommadsadegh**

Project 4.22. Limitations for Protected Transport and Exotic Topological States in Topological Semiconductors [dr hab. Wojciech Brzezicki]

**41. Mogharari Neda**

Project 4.23. Molecular photophysics of functional organic systems [dr hab. Jerzy Karpiuk]

**42. Feliniak Marcin**

Project 4.1. Quantum open systems of several ultra-cold atoms [dr hab. Tomasz Sowiński]

**43. Karpińska Karolina**

Project 4.21. CdTe/PbTe heterostructures for photonic applications [prof. dr hab. Grzegorz Karczewski/dr Michał Szot]

**44. Somakumar Ajeesh Kumar**

Project 4.9. Novel Composite Scintillation and thermoluminescent detectors based on epitaxial structures of orthosilicates and garnets [prof. dr hab. Andrzej Suchocki]

**45. Lysak Anastasiia**

Project 4.33. Quantum heterostructures based on ZnO:Eu for optoelectronics – structural characterization and optimization of growth technology [Prof. Adrian Kozanecki/Dr hab. Ewa Przeździecka]

**46. Altanany Sameh**

Project 4.11. Anomalous metal phase at the superconductor-insulator transition [prof. dr hab. Marta Cieplak]

**47. Nyandey Kwasi**

Project 4.4. Investigation of thermodynamics of evaporation of multi-component microdroplets – distillation at microscale [dr hab. inż. Daniel Jakubczyk]

**48. Sarawar Mahwish**

Project 4.28. Oxide materials implanted with rare earths [prof. dr hab. Elżbieta Guziewicz]

**49. Tanausu Hernandez Yanes**

Project 4.17. Temporal coherence of dipolar ultra-cold gases [dr hab. Emilia Witkowska]

**The Center for Theoretical Physics of the Polish Academy of Sciences****50. Dubey Swadheen**

Project 5.2 NUANCE 2 : Study of novel quantum phases in cold gases using semiclassical methods [dr hab. Krzysztof Pawłowski]



## The Institute of High Pressure Physics of the Polish Academy of Sciences

### **51. Anwar Ghiyas**

Project 6.5. Excitonic effects in perovskites for the photovoltaic and laser applications  
[dr hab. Małgorzata Wierzbowska, prof. IWC PAN]

### **52. Muhammed Aktas**

Project 6.3. Semiconductor nitride light emitters with polarization doping [prof. dr hab. Piotr Perlin]

### **53. Mohammad Bagheri**

Project 6.1. Electronic band structure calculations of nitride and oxide superlattices [dr hab. Izabela Gorczyca, prof. IWC PAN]

## Maria Skłodowska-Curie National Research Institute of Oncology

### **54. Kusowska Aleksandra**

Project 7.1. Deciphering molecular mechanism of CDK8 inhibitors action in acute myeloid leukemia [dr hab. Michał Mikula]

### **55. Zając Agnieszka**

Project 7.2. Development of immunological-molecular system of chondrosarcoma profiling [dr hab Anna Czarnecka/ dr hab Michał Mikula]

## The International Institute of Molecular and Cell Biology in Warsaw

### **56. Mackiewicz Zuzanna**

Project 9.1. Cytoplasmic polyadenylation as a central regulator of physiological processes [prof. dr hab. Andrzej Dziembowski]



**57. Mazur Michał**

Project 9.1. Cytoplasmic polyadenylation as a central regulator of physiological processes [prof. dr hab. Andrzej Dziembowski]

**58. Tutak Katarzyna**

Project 9.1. Cytoplasmic polyadenylation as a central regulator of physiological processes [prof. dr hab. Andrzej Dziembowski]

**59. Latoszek Ewelina**

Project 9.2. Linking abnormal Ca<sup>2+</sup> signaling and the unfolded protein response with Huntington's disease pathology in both YAC128 mouse model and iPSC-derived neurons from HD patients [dr Magdalena Czeredys, prof. dr hab. Jacek Kuźnicki]