



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

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

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

**1. Świderska Julia**

Project 1.1. Memory mechanisms in the ageing brain- alternative synaptic processes and neuronal networks [prof. Katarzyna Radwańska, Ph.D., D.Sc.]

**2. Puchalska Monika**

Project 1.1. Memory mechanisms in the ageing brain- alternative synaptic processes and neuronal networks [prof. Katarzyna Radwańska, Ph.D., D.Sc.]

**3. Acosta Carlos**

Project 1.2 Strategies to increase the performance of skeletal muscles and brown adipose tissue to combat obesity and related diseases [Grzegorz Sumara, Ph.D.]

**4. G Gokul**

Project 1.4. Ubiquitin as a modulator of the mitochondrial protein import process [Piotr Brągoszewski, Ph.D.,]

**5. Szponar Magdalena**

Project 1.6. Using machine learning in optimization of diagnosis of psychiatric disorders [Jan Kamiński, Ph.D./Ewelina Knapska, Ph.D., D.Sc.]

**6. Włodkowska Urszula**

Project 1.7. Cortical reinstatement in health and Alzheimer's' disease: a direct approach to testing the hippocampal memory indexing theory [Adam Hamed, Ph.D., D.Sc./Rafał Czajkowski, Ph.D./]



**7. Sawicka Katarzyna**

Project 1.7. Cortical reinstatement in health and Alzheimer's' disease: a direct approach to testing the hippocampal memory indexing theory [Adam Hamed, Ph.D., D.Sc./Rafał Czajkowski, Ph.D./]

**8. Jacek Karol**

Project 1.8. Using single-cell omics and spatial transcriptomics to unravel how specific genetic changes result in context-specific immune responses in experimental gliomas [prof. Bożena Kamińska - Kaczmarek, Ph.D., D.Sc.]

**9. Łuczak – Sobotkowska Zuzanna**

Project 1.9. Understanding the role of microglia in aging of the brain and depression [prof. Bożena Kamińska - Kaczmarek, Ph.D., D.Sc.]

**10. Tomaszewska Weronika**

Project 1.11. To investigate the interplay between metabolic and epigenetic factors in pathogenesis and inheritance of neuropsychiatric disorders [dr Ali Jawaid]

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

**1. Zaorska Ewelina**

Project 2.1. Chemoenzymatic cascades of new Cu reactions of significant application potential [prof. Ryszard Ostaszewski]

**2. Najczuk Justyna**

Project 2.2. Synthesis of structurally diverse medium- and large-sized rings by controlled decomposition of tetraoxanes and related compounds [prof. Bartłomiej Furman]

**3. Sheeja Minu**

Project 2.3. Synthesis of Organic Molecular Memristors [dr Cina Foroutan-Nejad/prof. Daniel T. Gryko]

**4. Predygier Jędrzej**

Project 2.4. Highly emissive, strongly polarized multiple helicenes built from pyrrolo[3,2-b]pyrrole scaffolds [prof. Daniel T. Gryko]



## **5. Gadina Louis**

Project 2.5. Synthesis of supramolecular catalysts inspired by enzymes [prof. dr Bartosz Grzybowski]

# **The Institute of Physical Chemistry of the Polish Academy of Sciences**

## **Kowalski Adam**

Project 3.1. High throughput microfluidic system for fast determination of the equilibrium constant for biomolecular complexes: application to RNA-DNA interactions [prof. dr hab. Robert Hołyst]

## **2. Vaishnav Yuvraj**

Project 3.2. Nanoengineering of multicomponent metal-free carbonaceous materials for biooil upgrading through ultrasound-assisted selective redox photo-catalysis in continuous-flow reactors [dr hab. inż. Juan Carlos Colmenares Quintero]

## **3. Ochirbat Enkhlin**

Project 3.3. Development of a comprehensive bacteria detection procedure: the creation of a sensor and development of new protocols for sample preparation and deposition [prof. dr hab. Maciej Wojtkowski/ dr Jan Paczesny]

## **4. Korol Dominik**

Project 3.6. Paper and other fibrous materials as micro/nanomolds for deposition on electrodes surface molecularly imprinted polymers of developed surface [dr hab. Piyush S. Sharma/ dr. inż. Maciej Cieplak]

## **5. Maciejewska – Komorowska Julia**

Project 3.7. Paper-based liquid-liquid electrochemistry [dr hab. Martin Jönsson-Niedziółka]

## **6. Mazurkiewicz Wojciech**

Project 3.8. Electrochemical analysis of neurobiologically relevant analytes [dr hab. Martin Jönsson-Niedziółka/ dr Emilia Witkowska Nery]

## **7. Jadhav Rohitkumar**

Project 3.9. Probing the structure–property relationships in single-crystalline lead halide perovskites for photodetector applications [dr hab. Daniel Prochowicz]

## **8. Galińska Anna**

Project 3.10. The role of the basal forebrain in visual processing [dr hab. Ewa Kublik/ dr Andrzej Foik]

**9. Trzaska Adam**

Project 3.11. Mechanochemical synthesis of hybrid inorganic-organic functional materials [prof. dr hab. inż. Janusz Lewiński]

**The Institute of Physics of the Polish Academy of Sciences****1. Anila Midhun**

Project 4.1. Molecular dynamics of systems of the intrinsically disordered proteins (theoretical) [prof. dr hab. Marek Cieplak]

**2. Aziz Fiza**

Project 4.2. Computer simulations of partially disordered proteins (theoretical) [dr hab. Bartosz Różycki]

**3. Ataelahi Mitra**

Project 4.4. Ab initio investigations of Hund's Rule breaking organic molecules (theoretical) [prof. dr hab. Andrzej Sobolewski]

**4. Singh Priya**

Project 4.5. Thermodynamics of nanostructures at low temperatures (experimental) [dr Maciej Zgirski/ prof. dr hab. Maciej Sawicki]

**The Center for Theoretical Physics of the Polish Academy of Sciences****1. Hunde Feven Markos**

Project 5.1. COLAB: COsmic LABoratory for Baryons and dark matter [prof. Wojciech Hellwing]



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

### 1. Mikłas Alicja

Project 6.1. Excitonic effects in perovskites for the photovoltaic and laser applications  
[dr hab. Małgorzata Wierzbowska, prof. IWC PAN]

### 2. Bilska Oliwia

Project 6.2. Nitride photonic structures fabricated using selective ion implantation and electrochemical etching [prof. dr hab. Czesław Skierbiszewski / dr inż. Marta Sawicka]

### 3. Gołyga Krzysztof

Project 6.3. Epitaxy and properties of nitride based optoelectronic devices InAlGaN/NbN [prof. dr hab. Czesław Skierbiszewski]

### 4. Sobczak Cyprian

Project 6.4. Elastically isotropic and metastable body-centered cubic titanium alloys - First principles and empirical investigation [dr hab. Paweł Strąk]

## Maria Skłodowska-Curie National Institute of Oncology State Research Institute

### 1. Kianfar Mostafa

Project 7.1. Towards re-definition of the mechanisms of entotic cell death; the role of HAX1 and SEPT7 in the regulation of entosis in breast cancer models *in vivo* and *in vitro* [Ewa A. Grzybowska]

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

### 1. Mahadeva Raghunandan

Project 9.2. Identifying unique adaptive responses of red pulp macrophages to iron deficiency (NCN/SONATA) [Wojciech Pokrzywa, PhD DSc./ Katarzyna Mleczko-Sanecka, PhD]



**2. Jain Ruhi**

Project 9.3. Experimental analysis of molecular determinants involved in epilepsy  
(NCN/OPUS) [prof. Jacek Kuźnicki/ Vladimir Korzh, PhD]

**3. Fedenko Anna**

Project 9.4. Genomics and Epigenomics of acute myelogenous leukemia (AML) [prof. Matthias Bochtler]

Przewodniczący Rady Dyrektorów  
Warszawska Szkoła Doktorska  
Nauk Ścisłych i BioMedycznych

*A. Dobryn*  
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