



## **Results of the 2nd recruitment to the Warsaw PhD School of Natural and BioMedical Sciences [Warsaw-4-PhD]**

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

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

##### **1. Skonieczna Edyta**

Project 1.3 Deciphering activity of CA1 region during alcohol seeking and consumption [dr hab. Katarzyna Radwańska]

##### **2. Sekretarska Justyna**

Project 1.5 Identification of enzymatic proteins of central pair apparatus and the analysis of their role in regulation of ciliary beating [dr hab. Dorota Włoga/dr Ewa Joachimiak]

##### **3. Kulesza Alicja**

Project 1.1 The role of autophagy in the regulation of secretion of extracellular vesicles and proteins at different stages of vascular smooth muscle cells senescence [dr hab. Grażyna Mosieniak]

##### **4. Pilanc – Kudlek Paulina**

Project 1.8 Reprogramming antitumor innate immunity in gliomas with osteopontin/Spp1interfering peptides and nanovehicles-delivered siRNA/shRNA [dr Aleksandra Ellert-Miklaszewska]

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

##### **1. Shreyas Kandhadai Vasantham**

Project 3.2 Microfluidic-coupled Simulated Raman Spectroscopy (SRS) for rapid detection and imaging of cancer cells [Prof. dr hab. Garstecki Piotr/dr Ladislav Derzsi]



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## **2. Francesco Nalin**

Project 3.3 Label-free optical detection methods for detection of biological and chemical reactions in nanoliter droplets [Prof. dr hab. Garstecki Piotr]

## **3. Karolina Kucharska**

Project 3.6 Quantification of anthracyclines drugs interactions with intranuclear DNA in living cells on the example of daunorubicin [Prof. Dr hab. Robert Hołyst / dr Tomasz Kalwarczyk]

## **4. Skrzyszewski Maciej**

Project 3.7 Quantification of anthracyclines drugs interactions with intranuclear DNA in living cells on the example of idarubicin [Prof. Dr hab. Robert Hołyst / dr Tomasz Kalwarczyk]

## **5. Borkenhagen Aleksandra**

Project 3.11 Synthesis of new MOF materials utilizing molecular building blocks [prof. dr hab. inż. Janusz Lewiński]

## **The Institute of Physics of the Polish Academy of Sciences**

### **1. Khan Sana**

Projekt 4.3 Electron-transport phenomena in low-dimensional structures of magnetic semiconductors [prof. dr hab. Tadeusz Wosiński]

### **2. Aswathi MC**

Project 4.8 Magnetic order in nanolaminated MAX phases based on Mn<sub>2</sub>GaC [dr hab. Marek Wójcik]

### **3. Brzozowski Damian**

Project 4.9 Atomic short-range order in Heusler alloy nanostructures: NMR studies [dr hab. Ewa Jędryka]

#### **4. Pervez Waqas**

Project 4.11 Molecular beam epitaxial growth and characterization of light emitting diodes (nanoLEDs) based on nanowires of nitride semiconductors [prof. dr hab. Zbigniew Żytkiewicz/ dr Marta Sobańska]

#### **5. Dhundhwal Ritika**

Project 4.13 Topological Aspects of Superconductivity and Ferromagnetism in Group IV Chalcogenides - an Experimental Approach [prof. dr hab. Maciej Sawicki]

#### **6. Edathumkandy Yadhu**

Project 4.15 Atomistic spin model simulations of magnetic properties of ferromagnetic [dr hab. Maciej Sawicki / dr Dariusz Sztenkiel]

#### **7. Mishra (Joshi) Sushma**

Project 4.21 Electrical conductivity and defect clusters in zinc oxide formed as a result of intentional and unintentional doping [prof. dr hab. Elżbieta Guzewicz]

#### **9. Kruk Maciej**

Project 4.26 Quantum droplets from first principles [dr hab. Piotr Deuar]

### **The Center for Theoretical Physics of the Polish Academy of Sciences**

#### **1. Suhani Gupta**

Project 4.1 VErTIGO - VElocities Testing Gravity and cOsmology [dr Wojciech Hellwing]



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

### 1. Mikosza Maciej

Project 6.1 Excess energy dissipation mechanism during adsorption at crystalline surfaces - electron transfer [prof dr hab. Stanisław Krukowski]

### 2. Sierakowski Kacper

Project 6.5 Gallium nitride (GaN) crystallized by ammonothermal method investigation of growth mechanisms in selected crystallographic directions [dr hab. inż. Michał Boćkowski]

### 3. Grabińska Karolina

Project 6.5 Gallium nitride (GaN) crystallized by ammonothermal method investigation of growth mechanisms in selected crystallographic directions [dr hab. inż. Michał Boćkowski]

### 4. Jaroszyński Piotr

Project 6.12 Develop a process for overcoming the equilibrium crystal shape in gallium nitride (GaN) crystal growth from the vapor phase [dr hab. inż. Michał Boćkowski]

### 5. Sławińska Julia

Project 6.8 Nitride based micro - LEDs and micro - LEDs arrays grown by Plasma Assisted Molecular Beam Epitaxy [prof. dr hab. Czesław Skierbiszewski]

### 6. Chlipała Mikołaj

Project 6.9 Epitaxial growth of NbN/GaN structures by Plasma Assisted Molecular Beam Epitaxy [prof. dr hab. Czesław Skierbiszewski]

### 7. Fiuczek Natalia

Project 6.10 Nitride based photonic structures: modeling of optical properties and growth by Plasma Assisted Molecular Beam Epitaxy and electrochemical etching [prof. dr hab. Czesław Skierbiszewski]



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## **8. Raghvender**

Project 6.7 Topological phase transition and properties of topological insulator state in semiconductor quantum wells based on indium gallium nitride [dr hab. Sławomir Paweł Łepkowski ,prof. w IWC PAN]

## **9. Ghasemi Hassan**

Project 6.4 Excitonic effects in the III-V and II-VI semiconductor quantum wells [dr hab. Małgorzata Wierzbowska, prof. IWC PAN]