

**Prof. dr hab. inż. Andrzej Miniewicz** [andrzej.miniewicz@pwr.edu.pl](mailto:andrzej.miniewicz@pwr.edu.pl)

- Laser light absorption as a tool for optomechanical micro-manipulation.

**Dr hab. inż. Łukasz Berlicki, prof. nadzw.** [lukasz.berlicki@pwr.edu.pl](mailto:lukasz.berlicki@pwr.edu.pl)

- Design, synthesis and structural studies of mini-proteins.
- Design, synthesis and catalytic efficiency of foldamer-based artificial enzymes.

**Dr hab. inż. Adam Kiersnowski** [adam.kiersnowski@pwr.edu.pl](mailto:adam.kiersnowski@pwr.edu.pl)

- Formation of ordered phases in the blends of poly(3-alkylthiophene-co-thiophenes) with rylene dyes.
- Structure and properties of poly(vinylidene fluoride) nanocomposites' films obtained by laser-assisted zone crystallization technique.

**Dr hab. inż. Marcin Nyk** [marcin.nyk@pwr.edu.pl](mailto:marcin.nyk@pwr.edu.pl)

- Synthesis and optical characterization of lanthanide doped colloidal nanocrystals.
- Synthesis and optical properties of semiconductor quantum dots.
- Synthesis and physico-chemical characterization of advanced photonic nanomaterials with nonlinear optical and multimodal functionalities.

**Dr hab. inż. Tadeusz Andruniów, prof. nadzw.** [tadeusz.andruniow@pwr.edu.pl](mailto:tadeusz.andruniow@pwr.edu.pl)

- Modelling of enzymatic reaction in cobalamins.
- Semi-automatic construction of rhodopsin QM/MM models.
- Exploration of excited-state reaction profiles in artificial rhodopsin pigments.

**Dr hab. inż. Marcin Sienczyk** [marcin.sienczyk@pwr.edu.pl](mailto:marcin.sienczyk@pwr.edu.pl)

- Design, synthesis and biological activity of arboviral serine protease inhibitors.

**Dr hab. inż. Robert Góra** [robert.gora@pwr.edu.pl](mailto:robert.gora@pwr.edu.pl)

- Photochemistry and photophysics of the hypothetical prebiotic synthetic routes to biomolecules.

**Dr hab. inż. Tomasz Olszewski** [tomasz.olszewski@pwr.edu.pl](mailto:tomasz.olszewski@pwr.edu.pl)

- Application of H-phosphonates derivatives of tartaric acid as chiral auxiliary in asymmetric synthesis of substituted phosphonates and phosphonic acids.

**Dr hab. inż. Rafał Latajka, prof. nadzw.** [rafal.latajka@pwr.edu.pl](mailto:rafal.latajka@pwr.edu.pl)

- Enzymatic synthesis of antifreezing glycopeptides analogues (AFGP).

**Dr hab. inż. Paweł Pohl, prof. nadzw.** [pawel.pohl@pwr.edu.pl](mailto:pawel.pohl@pwr.edu.pl)

- Application of design of experiments and response surface methodology for developing and validating new methods of multielement analysis of food and

beverages with simplified sample preparation and detection by atomic spectrometry techniques .

**Dr hab. inż. Ewa Żymanczyk-Duda, prof. nadzw. [ewa.zymanczyk-duda@pwr.edu.pl](mailto:ewa.zymanczyk-duda@pwr.edu.pl)**

- Biocatalyzed synthesis of novel phosphonates derivatives - scaling up the selected procesess.
- Biological synthesis of resweratrol derivtives of free radical scavenging activity.

**Dr hab. inż. Jarosław Myśliwiec, prof. nadzw. [jaroslaw.mysliwiec@pwr.edu.pl](mailto:jaroslaw.mysliwiec@pwr.edu.pl)**

- Disordered photonics: nano and microresonators as sources of laser light.
- Liquid crystals for random lasing

**Prof. dr hab. inż. Artur Mucha [artur.mucha@pwr.edu.pl](mailto:artur.mucha@pwr.edu.pl)**

- New synthetic approaches to bioactive organophosphorus compounds