

EPR IN ZEBRAFISH RESEARCH

THEORY, TECHNIQUES, AND APPLICATIONS

WORKSHOP 26.09.2023 FROM 9:00 TILL 16:30

Join us for an intensive and comprehensive workshop tailored exclusively for zebrafish researchers. During this workshop we will introduce Electron Paramagnetic Resonance (EPR) spectroscopy, unravel its theory and unveil its potent applications in cellular and in vivo studies. Particularly, we will concentrate on melanin radical, spin probes, and spin traps studies.

Who Should Attend:

Zebrafish researchers working with melanin, melanoma, membrane fluidity, oxidative stress in cells and tissues.

Place:

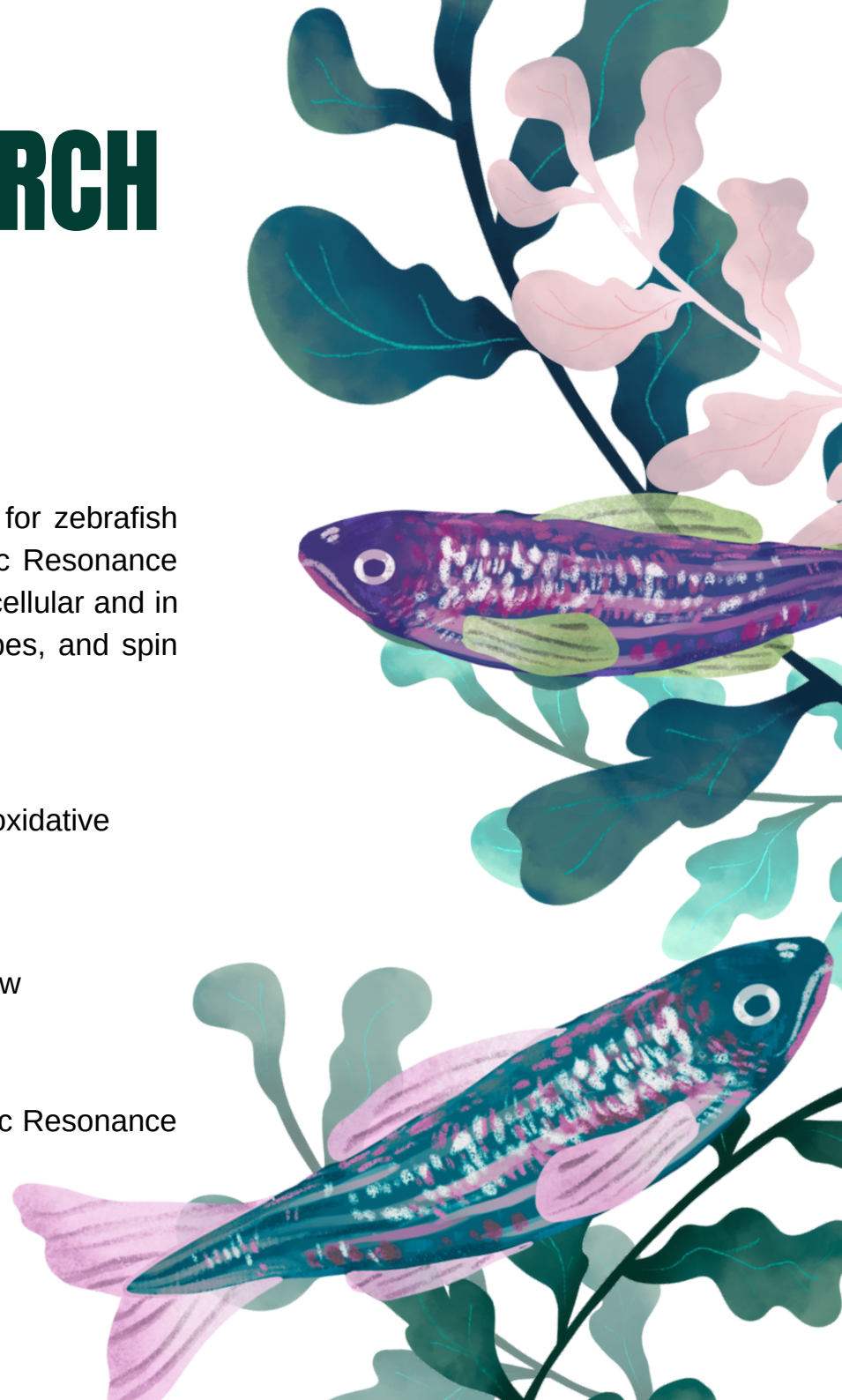
Department of Organic and Physical Chemistry, Medical University of Warsaw

Instructors:

We have more than 17 years experience with various Electron Paramagnetic Resonance techniques applied to biological, chemical and in vivo studies

dr Katarzyna Zawada (PhD in Chemistry, University of Warsaw)

dr Katerina Makarova PhD in Biophysics, University of Wageningen)



Workshop Highlights:

- Theory and Foundations of EPR in simple words
- Exploring Melanin Radical with EPR for melanoma studies in zebrafish (theory and practical)
- Exploring Membrane Fluidity with spin probe EPR (theory and practical)
- Spin Trapping Applications for the identification and investigation of reactive oxygen species and other radical species

Networking and Collaborative Opportunities:

Engage with us (dr Katerina Makarova and dr Katarzyna Zawada) and fellow zebrafish researchers, fostering connections and potential collaborations.

REGISTRATION → KMAKAROVA@WUM.EDU.PL

PLAN FOR GROUP 1

9:00 Welcome coffee

9:30 - 10:15 Electron Paramagnetic Resonance for biologists:
EPR for melanin radical studies
EPR for membrane fluidity studies

10:15-10:30 Break + Q and A

10:30 - 12:30 Practical workshop in the lab, everyone will learn how to operate EPR spectrometer, including sample preparation (solid samples, solutions and zebrafish embryos)

12:30 - 13:30 Lunch + Application of EPR for studies of tissues and cells

PLAN FOR GROUP 2

12:30 - 13:30 Lunch + Application of EPR for studies of tissues and cells

13:30 - 14:15 Electron Paramagnetic Resonance for biologists:
EPR for melanin radical studies
EPR for membrane fluidity studies

14:15- 14:30 Break + Q and A

14:30 - 16:30 Practical workshop in the lab, everyone will learn how to operate EPR spectrometer, including sample preparation (solid samples, solutions and zebrafish embryos)

16:30-17:00 Coffee