

## Molecular Electrochemistry and Nanosystems

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The M.E.N. Group focuses on molecular aspects of electrochemical reactions and nanosystems, from both fundamental and applied viewpoints. Specific research topics include:

- Electron transfer through molecular bridges and interfaces;
- Dissociative electron transfer;
- Monolayer-protected clusters: electrochemical, optical and magnetic properties, redox catalysis, drug-delivery systems;
- Electrochemical sensors for cancer biomarkers and volatile chemicals;
- Self-assembled monolayers of conformationally constrained peptides.

The M.E.N. group is equipped with state-of-the-art electrochemical instrumentations, including electrogenerated chemiluminescence and SECM, STM and AFM, PM-IRRAS and UV-visible spectrometers, HPLC.

- *Electrocrystallization of Monolayer Protected Gold Clusters: Opening the Door to Quality, Quantity and New Structures*, J. Am. Chem. Soc., **2017**, 139, 4168-4175.
- *Magnetic Ordering in Gold Nanoclusters*, ACS Omega, **2017**, 2, 2607-2917.
- *From Blue to Green: Fine Tuning of Photoluminescence and Electrochemiluminescence in Bifunctional Organic Dyes*, J. Am. Chem. Soc., **2017**, 139, 2060-2069.
- *Molecular Electrochemistry of Monolayer-Protected Clusters*, Curr. Opinion Electrochem., **2017**, 2, 18-25.
- *A Magnetic Look into the Protecting layer of Au<sub>25</sub> Clusters*, Chem. Sci., **2016**, 7, 6910-6918.