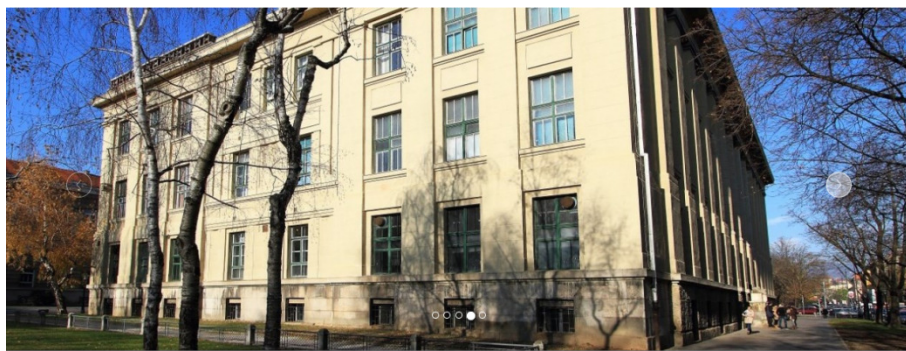




University of Zagreb
Faculty of Chemical Engineering
and Technology



Integrated battery development at the Faculty of Chemical Engineering and Technology, University of Zagreb



Zoran Mandić



University of Zagreb
Faculty of Chemical Engineering
and Technology



Education and science

Leading Faculty of Chemical Engineering in Croatia (aprox. 200 employees)

Recognized as an institution of knowledge, excellence, interdisciplinary research and tradition

Education – aprox. 1100 studnets

UniZg – aprox. 65000 students

Science - among top research institutions in Croatia



50+

International projects
(H2020, FP7, FP6, UKF,
EUREKA, bilateral projects)

100+

National projects
(HRZZ, MZO, HAMAG-BICRO)



Active in promotion of chemical engineering and chemistry and positive impact on society

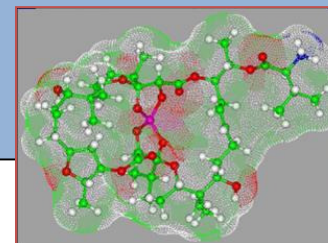
Significant impact on industrial development in region

Supports entrepreneurship (spin off)



200+

Projects with industrial
and public sector



„Comprehensive water technology” – tvrtka kćer....

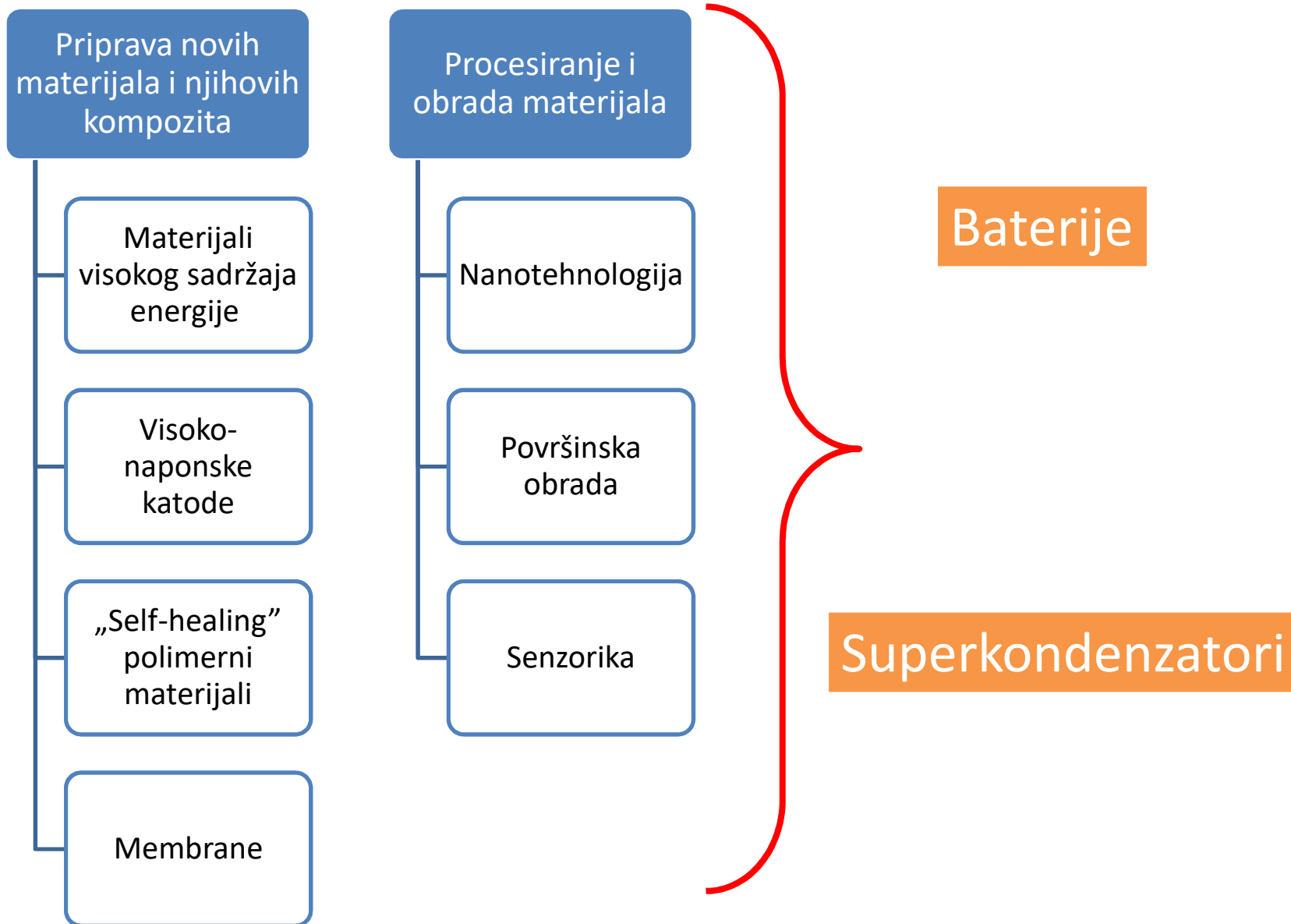
Primijenjena
kemija

Elektrokemijsko
inženjerstvo

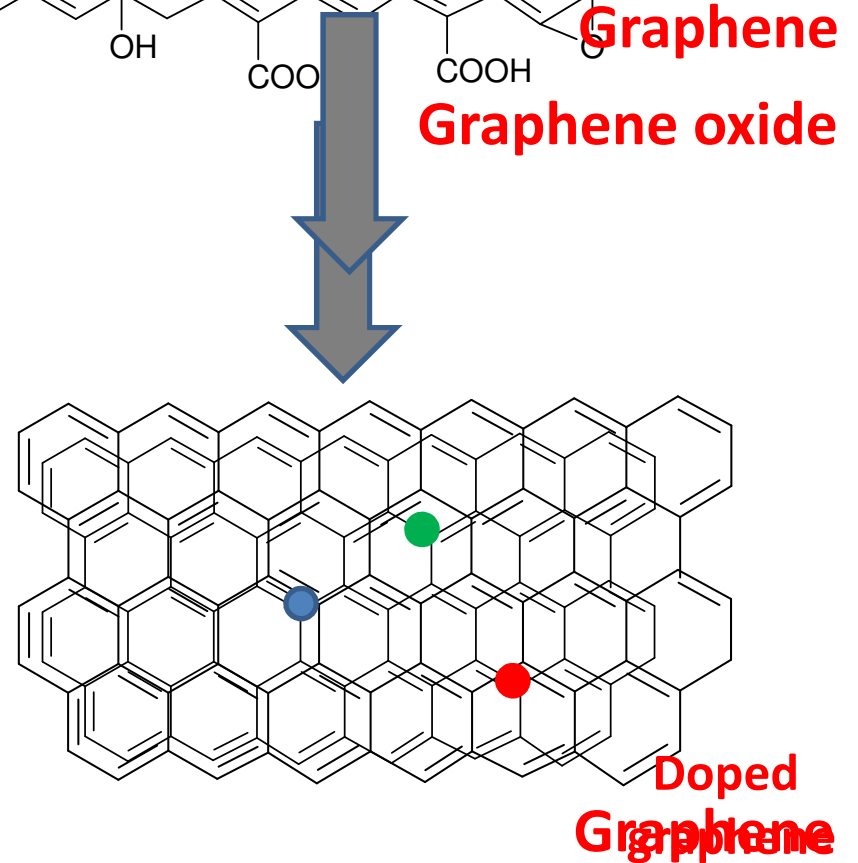
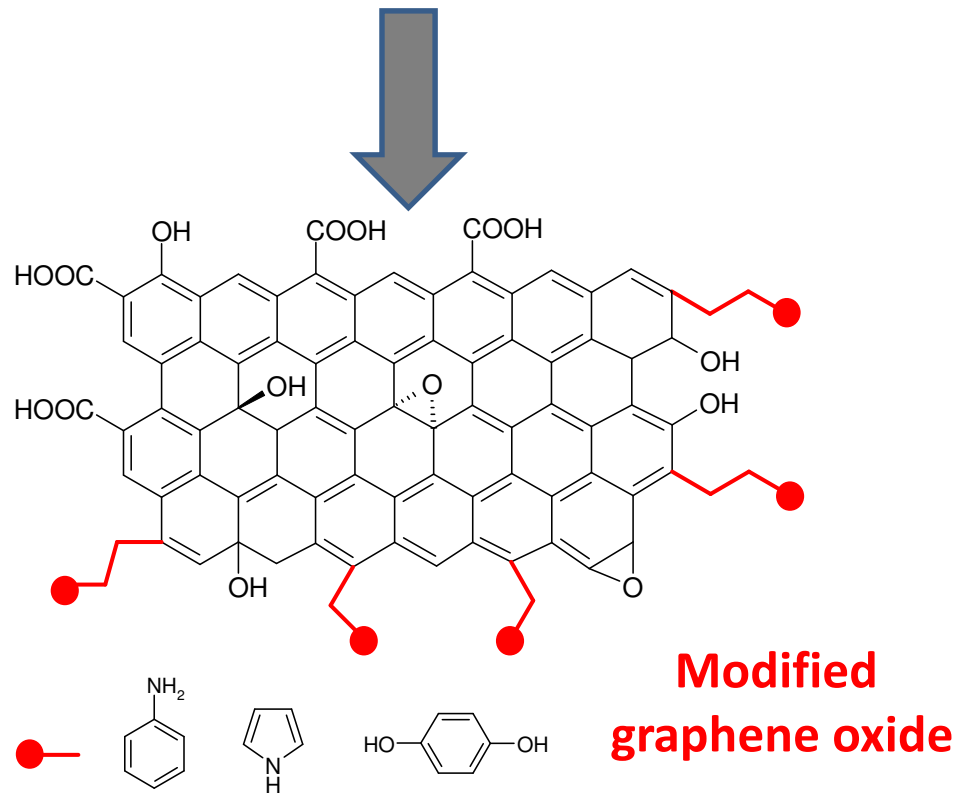
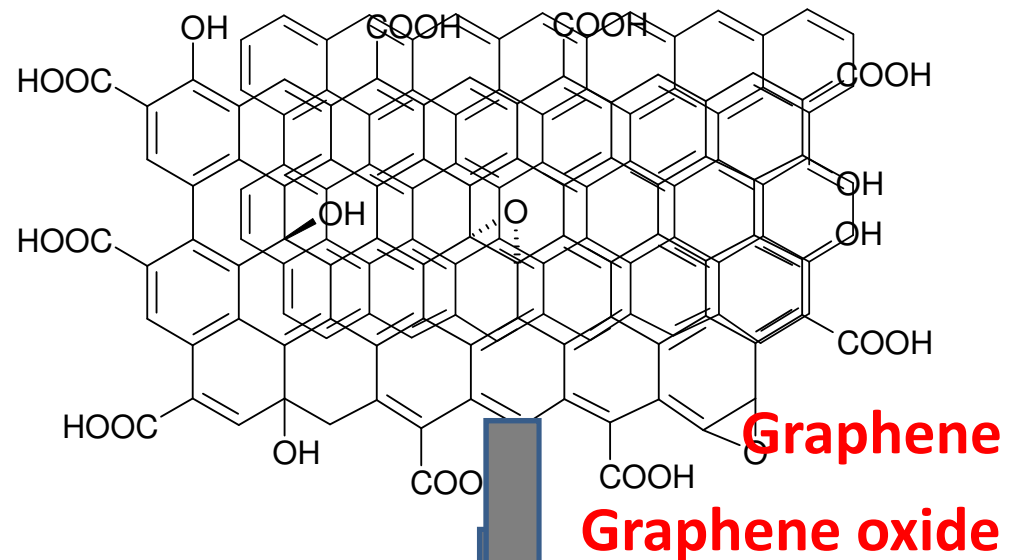
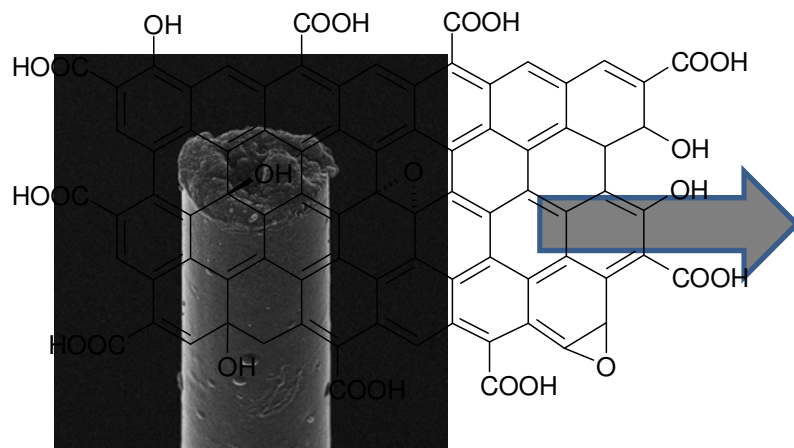
Inženjerstvo
materijala

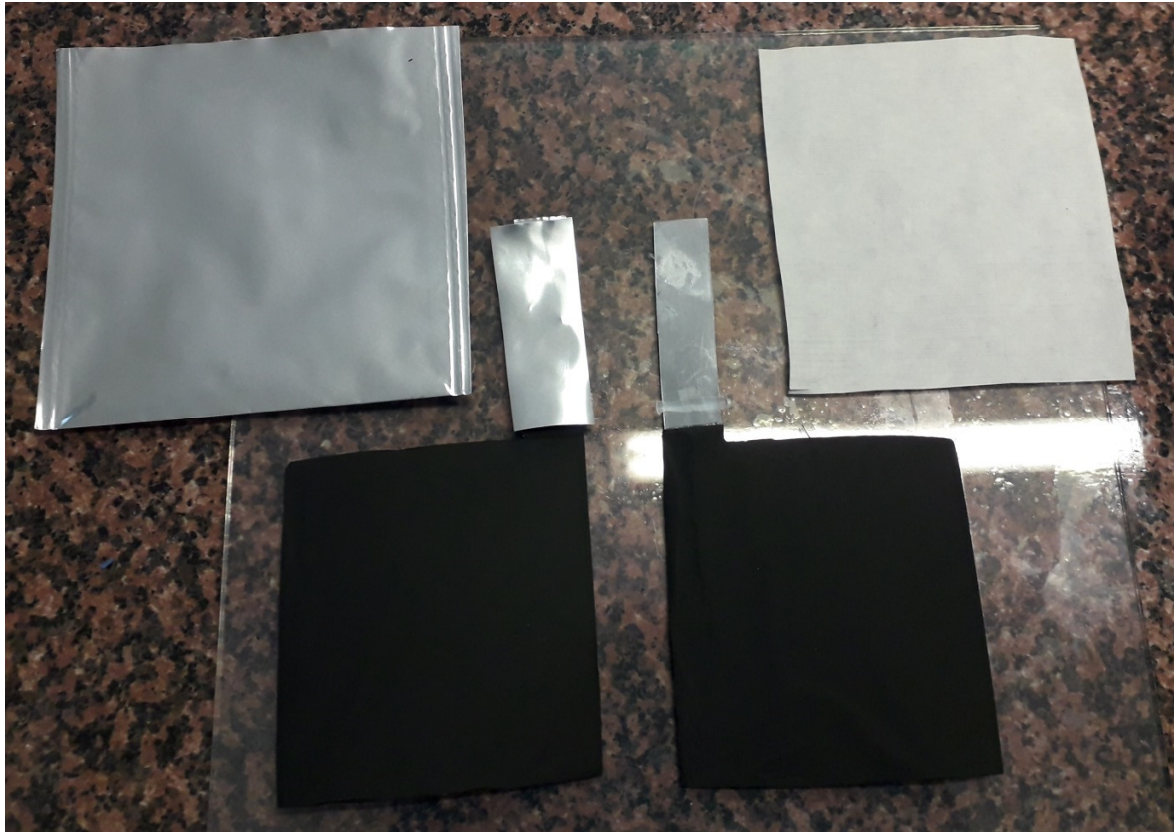
Procesno
inženjerstvo





Improved graphene based anodes





| | Commercial | Assembled |
|--------------------------------------|------------|-----------|
| Specific capacitance [F/g] | 18.6 | 21.1 |
| Specific ESR [Ωcm^2] | 1.26 | 2.60 |
| Specific energy density [J/g] | 69 | 79 |
| Specific power density [W/g] | 135 | 270 |