



*speaker

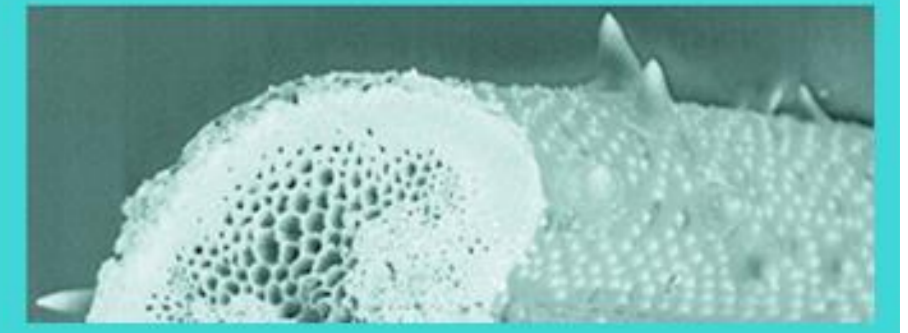
Comparison of structure of different Adriatic Sea shells

Irena Žmak*, Tomislav Filetin, Suzana Jakovljević

University of Zagreb, Croatia
Faculty of Mechanical Engineering
and Naval Architecture

Euro Bio-inspired Materials

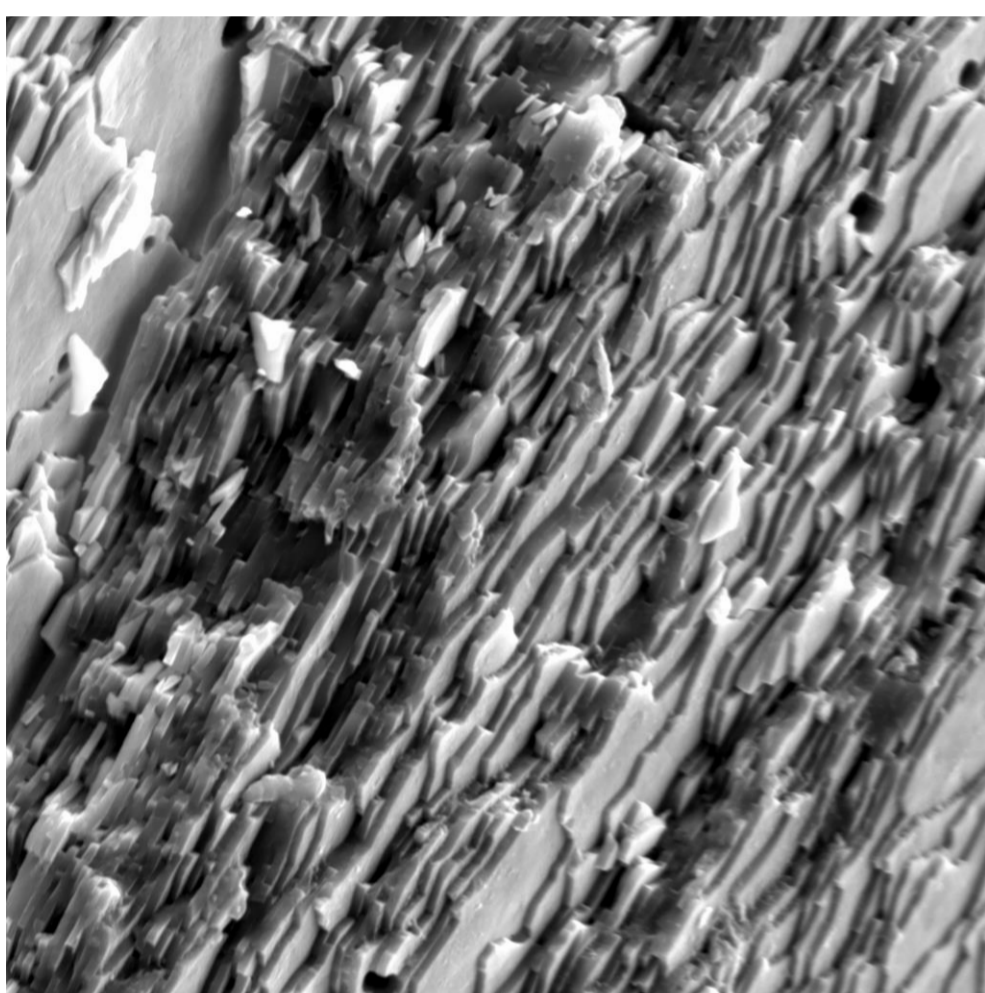
International School and Conference
on Biological Materials Science



Monodonta

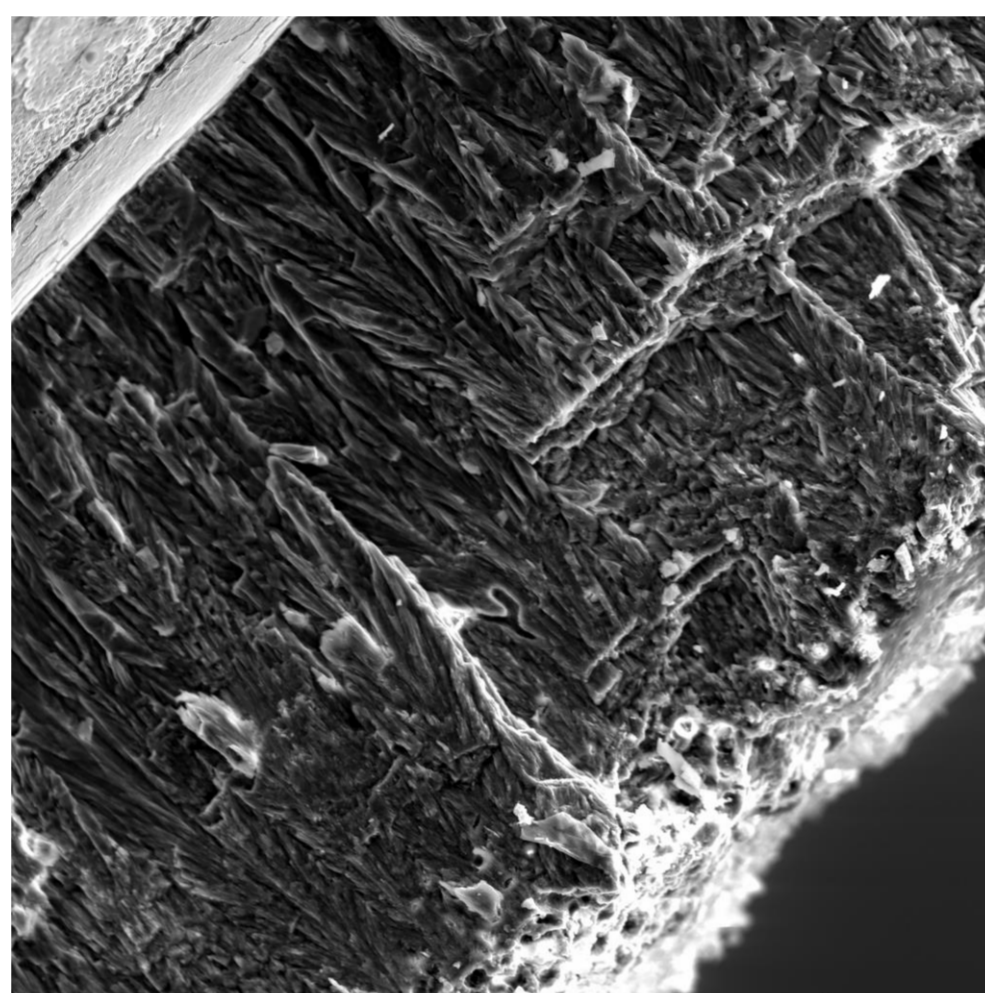


Limpet



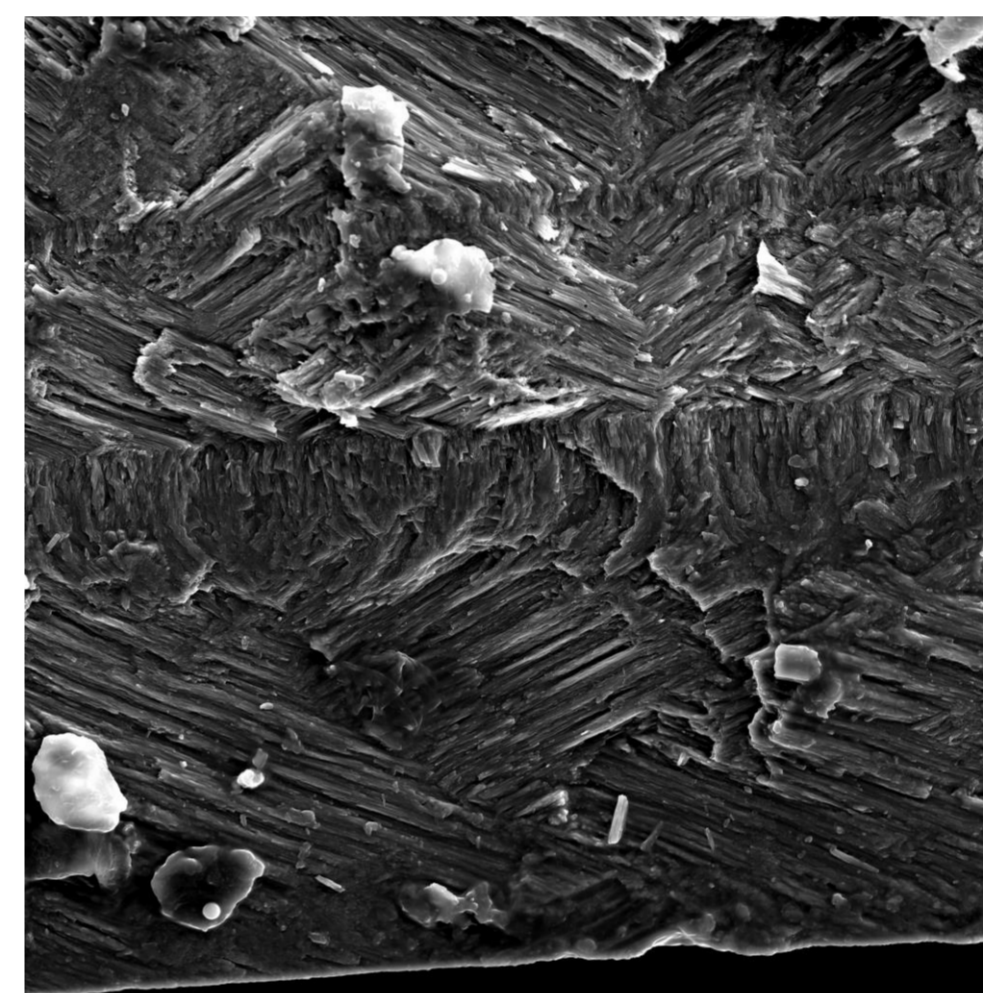
SEM MAG: 9.05 kx
HV: 20.0 kV
VAC: HiVac
DET: SE Detector
DATE: 02/19/14
Name: nanara-1
20 um
Vega ©Tescan
Digital Microscopy Imaging
Faculty of Mech. Engineering, Dpt of Materials
nanara

Monodonta: inner layer, 9050 x
Nacre microstructure



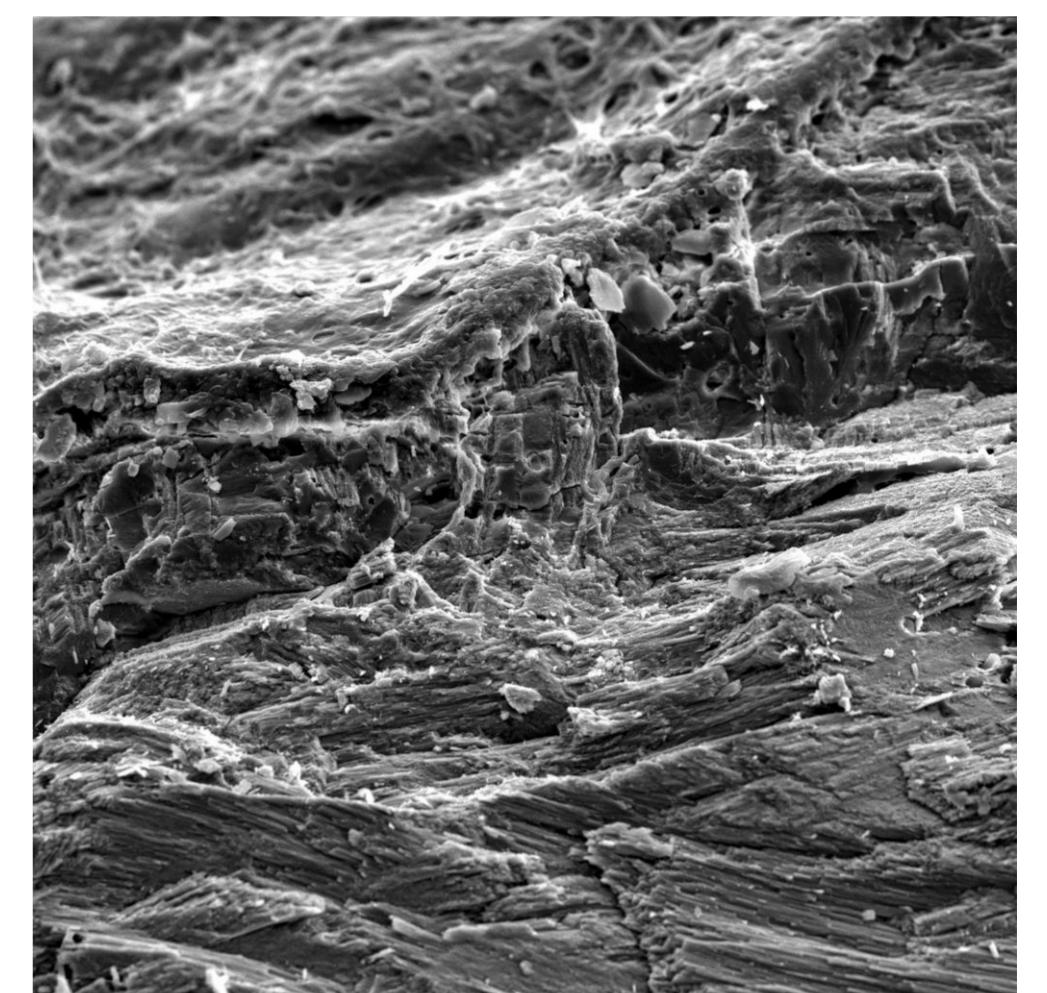
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DET: SE Detector
DATE: 02/19/14
Name: nanara-2
100 um
Vega ©Tescan
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vanjski dio nanara

Monodonta: outer layer, 1990 x
Crossed lamellae microstructure



SEM MAG: 2.52 kx
HV: 20.0 kV
VAC: HiVac
DET: SE Detector
DATE: 01/30/14
Name: prijeljak vrh -1
100 um
Vega ©Tescan
Digital Microscopy Imaging
Faculty of Mech. Engineering, Dpt of Materials
prijeljak vrh - uz unutarnji dio školjke

Limpet: inner layer, 2520 x
Crossed lamellae microstructure throughout the whole cross section



SEM MAG: 945 x
HV: 20.0 kV
VAC: HiVac
DET: SE Detector
DATE: 01/30/14
Name: prijeljak vrh -4
100 um
Vega ©Tescan
Digital Microscopy Imaging
Faculty of Mech. Engineering, Dpt of Materials
prijeljak vrh vanjski dio

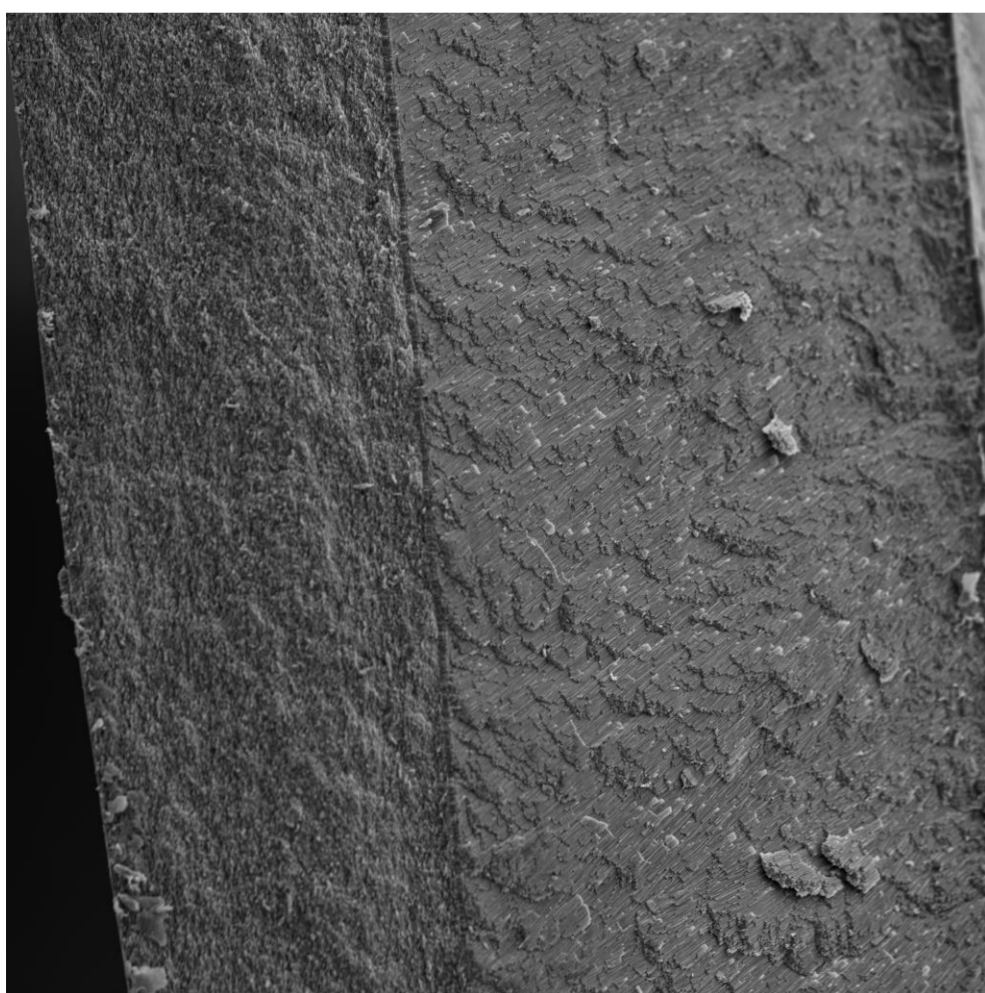
Limpet: outer layer, 945 x



Mussel

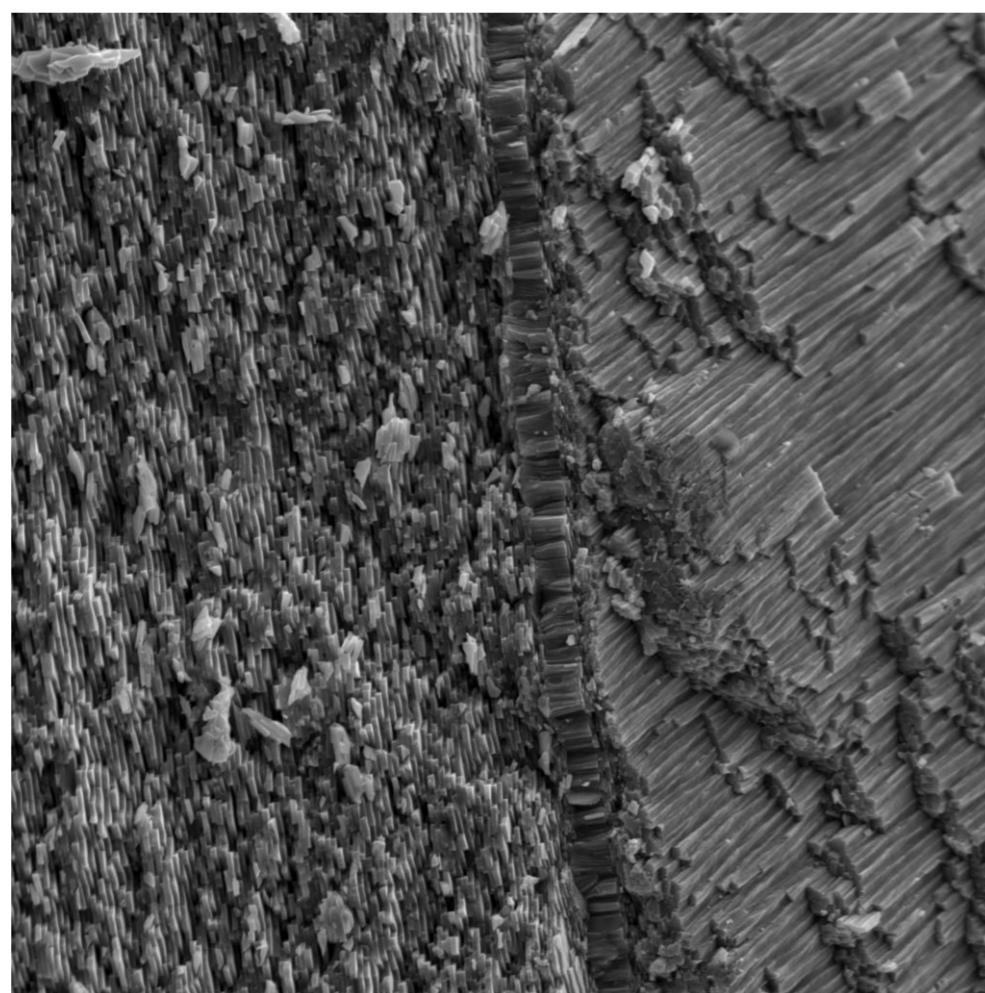


Noble pen shell



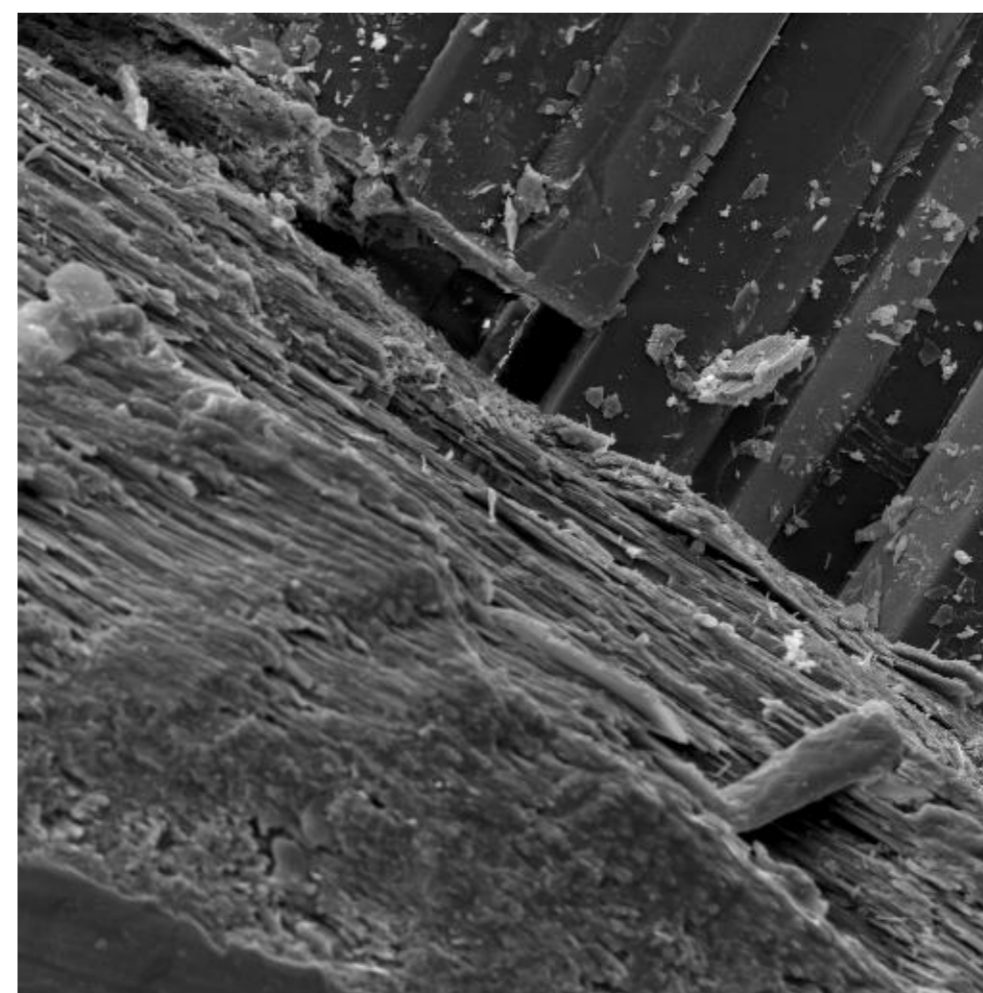
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HV: 20.0 kV
VAC: HiVac
DET: SE Detector
DATE: 02/19/14
Name: dagnja-1
200 um
Vega ©Tescan
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dagnja

Mussel: inner/outer, 679 x
Inside - Nacre vs. Outside - Fibrous prismatic microstructure



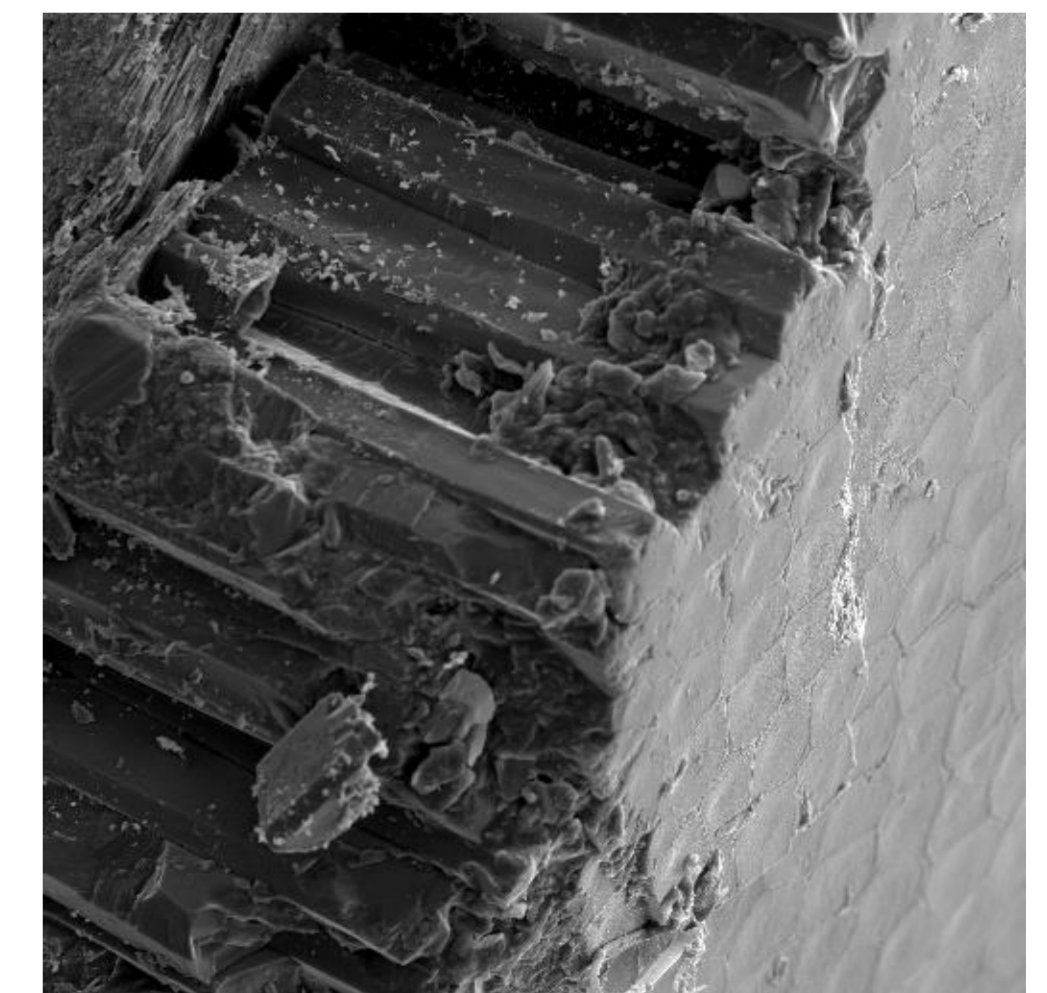
SEM MAG: 4.82 kx
HV: 20.0 kV
VAC: HiVac
DET: SE Detector
DATE: 02/19/14
Name: dagnja-2
50 um
Vega ©Tescan
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Faculty of Mech. Engineering, Dpt of Materials
dagnja

Mussel: inner/outer layer contact, 4820 x



SEM MAG: 497 x
DATE: 05/13/11
Name: Gornja poprečni žravko
DET: SE Detector
VAC: HiVac
100 um
Vega ©Tescan
Digital Microscopy Imaging
Faculty of Mechanical Engineering, Zagreb, Croatia
Filetin

Noble pen shell: inner layer, 497 x
Nacre microstructure



SEM MAG: 297 x
DATE: 05/13/11
Name: Gornja poprečni žravko
DET: SE Detector
VAC: HiVac
200 um
Vega ©Tescan
Digital Microscopy Imaging
Faculty of Mechanical Engineering, Zagreb, Croatia
Filetin

Noble pen shell: outer layer, 297 x
Simple prismatic microstructure