

MEMORIUL ȘTIINȚIFIC

Subsemnatul(a) **ȚURCAN-TROFIN GEORGIAN-OANA**, student doctorand în cadrul SCOSAAR, Școala Doctorală de Științe Chimice, înmatriculat la data de **1.11.2016**, în domeniul de studii universitare de doctorat **chimie**, la conducătorul de doctorat **Dr. Maria Cazacu**, autor al tezei de doctorat cu titlul **NOI COMPUȘI ORGANOSILICONICI FUNCȚIONALI**, declar următoarele activități realizate în cadrul stagiului doctoral (se vor păstra doar activitățile realizate):

A. Lista de lucrări științifice

1. **Turcan-Trofin, GO**; Zaltariov, MF; Roman, G; Shova, S; Vornicu, N; Balan-Porcarasu, M; Isac, DL; Neamtu, A; Cazacu, M **(2019)** *Amphiphilic silicone-bridged bis-triazoles as effective, selective metal ligands and biologically active agents in lipophilic environment*, Journal Of Molecular Liquids, 111560. doi:10.1016/j.molliq.2019.1115, WOS:000506712400005 (5,3 Q1)
2. **Turcan-Trofin, GO**; Zaltariov, MF; Iacob, M; Tiron, V; Branza, F; Racles, C; Cazacu, M. **(2019)** *Copper(II) complexes with spherical morphology generated in one step by amphiphilic ligands: in situ view of the self-assembling, characterization, catalytic activity*, Colloids And Surfaces A-Physicochemical And Engineering Aspects, 123756. doi:10.1016/j.colsurfa.2019.12, WOS:000488954800058 (4,9 Q2)
3. **Turcan-Trofin, GO**; Asandulesa, M; Balan-Porcarasu, M; Varganici, CD; Tiron, V; Racles, C; Cazacu, M **(2019)** *Linear and cyclic siloxanes functionalized with polar groups by thiol-ene addition: Synthesis, characterization and exploring some material behaviour*, Journal Of Molecular Liquids, 282, 187-196, DOI: 10.1016/j.molliq.2019.03.005, WOS:000465060400021 (5,3 Q1)
4. Cazacu, M; **Turcan-Trofin, GO**; Vlad, A; Bele, A; Shova, S; Nicolescu, A; Bargan, A **(2019)** *Hydrophobic, amorphous metal-organic network readily prepared by complexing the aluminum ion with a siloxane spaced dicarboxylic acid in aqueous medium*, Journal Of Applied Polymer Science, 47144. doi:10.1002/app.47144, WOS:000454228400035 (2,7 Q2)
5. **Turcan-Trofin, GO**; Avadanei, M; Shova, S; Vlad, A; Cazacu, M; Zaltariov, MF **(2018)** *Metallo-supramolecular assemblies of dinuclear Zn(II) and Mn(II) secondary building units*

(SBU)s and a bent silicon dicarboxylate ligand , Inorganica Chimica Acta , 483, 454-463, DOI: 10.1016/j.ica.2018.08.027, WOS:000445543100058 (2,7 Q2)

6. Cazacu, M., Damoc, M., Dascalu, M., **Turcan-Trofin, G.-O.**, (2025) Permethyated silicon: a structural motif with a critical role in shaping the properties of organic-inorganic compounds” Journal of Inorganic and Organometallic Polymers and Materials (2025). <https://doi.org/10.1007/s10904-025-03868-4> (3,9 Q2)

B. Cărți și manuale

C. Participări la conferințe/workshop-uri

Conferinte:

1. **Turcan-Trofin, G.-O.**, Roman, G., Vornicu, N., Shova, S. & Cazacu, M., *Siloxani funcționalizați cu heterocicluri cu azot*. Zilele Academice Iașene (ZAI), Iași, România, 2017.
2. **Turcan-Trofin, G.-O.**, Roman, G., Vornicu, N., Shova, S., Cazacu, M. *New silicone derivatives with biocidal activity*, *Current Trends in Bionanotechnologies*, A XXVIII-a ediție a Congresului Internațional sub sloganul „Pregătim viitorul promovând excelența”, 1-4 martie 2018, Apollonia, Iasi, Romania.
3. **Turcan-Trofin, G.-O.**, Zaltariov, M.-F., Shova, S. & Cazacu, M., (2018). *New ligands and materials developed on silicone substrates*. Tenth Cristofor I. Simionescu Symposium: Frontiers in Macromolecular and Supramolecular Science (CIS), București, România, 11–14 iunie 2018.
4. Zaltariov, M.-F., **Turcan-Trofin, G.-O.**, Shova, S., Racles, C. & Cazacu, M., 2018. *Versatility of Silane/Siloxane Building Blocks in Coordination Driven Self-assembling*. Tenth Cristofor I. Simionescu Symposium: Frontiers in Macromolecular and Supramolecular Science, (CIS), Academia Română, București, 8–14 iunie 2018. (Invited conference presented)

Postere:

1. **Turcan-Trofin, G.-O.**, Zaltariov, M.-F., Tugui, C., Cazacu, M., *Copper coordination compounds with spherical morphology based on methylcyclsiloxanes functionalized with carboxyl groups as ligands*. Poster prezentat la: 12th International Conference on Physics of Advanced Materials (ICPAM-12), Creta, Grecia. 22-28 septembrie 2018.
2. **Turcan-Trofin, G.-O.**, Zaltariov, M.-F., Shova, S., Cazacu, M. et al., *Functionalization of siloxane derivatives by attaching polar groups*. Poster prezentat la 21st International

Conference on Solid Compounds of Transition Elements (SCTE 2018), Viena, Austria, 25-29 martie 2018.

3. Zaltariov, M.-F., Avădanei, M., **Turcan-Trofin, G.-O.**, Vlad, A., Cazacu, M. & Shova, S., *Lanthanide-based MOFs built on silicon-containing carboxylate ligands: Synthetic strategies and properties evaluation*. Poster prezentat la 21st International Conference on Solid Compounds of Transition Elements (SCTE 2018), Viena, Austria, 25-29 martie 2018.
4. Cazacu, M., **Turcan-Trofin, G.-O.**, Zaltariov, M.-F., Dascalu, M., Vornicu, N. & Shova, S., *Bis-Triazoles Spaced by a Dimethylsilane or Tetramethyldisiloxane Motif as New Ligands and Biologically Active Agents*, 21st Romanian International Conference on Chemistry and Chemical Engineering (RICCCE'21), S6, Constanța-Mamaia, România, 4 - 7 septembrie 2019.

Workshop

1. *3rd Training School organizat de COST Action CA15119 (NANOUP TAKE)*; Rzeszow (Poland); 19-21 Septembrie 2018;

D. Brevete

E. Proiecte

1. Retele metal-organice cu hidrofobicitate fin controlata utilizand chimia siliconilor (SiMOFs)"Contract 114/2017/Dr. Maria Cazacu
2. "Mimarea mecanismelor viului prin abordari ale chimiei supramoleculare, in cinci dimensiuni (5D-nanoP) – PN-III-P4-ID-PCCF-2016-0050"; Contract 4/2018/Prof. Aatto Laaksonen

F. Stagii de cercetare/perfecționare

G. Cursuri de perfecționare

H. Alte activități

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Student-doctorand

