

Andriy Durygin

1. Name and academic rank:

Andriy Durygin, Adjunct Instructor.

2. Education – degree, discipline, institution, year

Post-Doctoral CeSMEC, Florida International University 2003-2005

PhD in Physics. Institute of Physics, Polish Academy of Sciences, Warsaw, Poland 1996-2002

Specialist (5 years program) in Electrical Engineering. State University Lvivska Politechnika, Lviv, Ukraine 1989-1994

3. Academic experience – institution, rank, title

Adjunct Faculty, MME Florida International University (2019-present) part -time

Adjunct Faculty, Miami Dade College (2012-2020) part -time

Research Coordinator, CeSMEC, Florida International University (2005-2015) full-time

4. Non-Academic experience:

Senior Engineer CeSMEC, Florida International University (2015—present) full-time

Engineer, Institute of Materials, Scientific Research Company "Carat" in department of Oxide Crystals, Lviv, Ukraine (1994 - 1996) full-time

5. Certifications or professional registrations: N/A

6. Current membership in professional organizations

Member and treasurer of High Pressure Science Society of America (HIPSSA)

7. Honors and awards

8. Service activities (within and outside of the institution)

Ad hoc reviewer for the following journals: Journal of Applied Physics Journal of Earth and Planetary Materials IEEE Transactions on Nuclear Science; International Journal of Hydrogen Energy. Co-organizer of SMEC meetings 2005-2017, Grant reviewer for Kentucky Science & Engineering Foundation

9. Briefly list the most important publications and presentations from the past five years

- O. Awadallah, A. Durygin, and Z. Cheng, “Unveiling the Phase Evolution of Sol–Gel Sulfurized $\text{Cu}_2\text{ZnSnS}_4$ Thin Films in ppm-Level H_2S : From Binary Sulfides to Quaternary Cu-Zn-Sn-S System,” J. Electron. Mater., Oct. 2020, doi: 10.1007/s11664-020-08539-3.
- Francy Mayoli Casallas Caicedo, Enrique Vera López, Arvind Agarwal, Vadym Drozd, Andriy Durygin, Alexander Franco Hernandez, Chunlei Wang,, “Synthesis of graphene oxide from graphite by ball milling,” Diam. Relat. Mater., vol. 109, p. 108064, Nov. 2020, doi: 10.1016/j.diamond.2020.108064.
- J. Belisario, S. Mondal, I. Khakpour, A. F. Hernandez, A. Durygin, and Z. Cheng, “Synthesis and flash sintering of $(\text{Hf}_{1-x}\text{Zr}_x)\text{B}_2$ solid solution powders,” J. Eur. Ceram. Soc., Dec. 2020, doi: 10.1016/j.jeurceramsoc.2020.12.015.
- Mora Mendoza, E. Y., Sarmiento Santos, A., Vera López, E., Drozd, V., Durygin, A., Chen, J. and Saxena, S. K. (2019) ‘Siderite Formation by Mechanochemical and High Pressure–

High Temperature Processes for CO₂ Capture Using Iron Ore as the Initial Sorbent', *Processes*, 7(10), p. 735. doi: 10.3390/pr7100735

- Mora Mendoza, E. Y., Sarmiento Santos, A., Vera López, E., Drozd, V., Durygin, A., Chen, J. and Saxena, S. K. (2019) 'Iron oxides as efficient sorbents for CO₂ capture', *Journal of Materials Research and Technology*, 8(3), pp. 2944–2956. doi: 10.1016/j.jmrt.2019.05.002.
- Najiba, S., Juhl, S. J., Mandal, M., Liu, C., Durygin, A., Chen, J., Fei, Y., Alem, N. and Landskron, K. (2019) 'Synthesis of nanopolycrystalline mesoporous diamond from periodic mesoporous carbon: Mesoporosity increases with increasing synthesis pressure', *Scripta Materialia*. Elsevier Ltd, 162, pp. 350–354. doi: 10.1016/j.scriptamat.2018.10.024.
- Sabarou, H., Drozd, V., Awadallah, O., Durygin, A., Darvish, S., Huang, D. and Zhong, Y. (2019) 'Structural investigation of oxygen stoichiometry during thermocycles in PMN-28PT', *Journal of Alloys and Compounds*. Elsevier B.V, 784, pp. 592–602. doi: 10.1016/j.jallcom.2018.12.358.
- Upal Roy, Vadym Drozd, Andriy Durygin, Jesse Rodriguez, Paul Barber, Venkata Atluri, Xiaohua Liu, Thomas G Voss, Surendra Saxena, and Madhavan Nair Characterization of Nanodiamond-based anti-HIV drug Delivery to the Brain, *Scientific Report Scientific Report* svolume 8, Article number: 1603 (2018)

10. Briefly list the most recent professional development activities

Co-organizer of SMEC meetings 2005-2017