

Deniz CAKIR

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EDUCATION

- 2023 - Present Ph.D. Materials Science and Engineering Department, Drexel University, Philadelphia, PA, USA
(Under the supervision of Prof. Yury Gogotsi)
Fulbright Scholar / George Hill Scholar
- 2021 – 2023 M.S. Micro and Nanotechnology Department, TOBB University of Economics and Technology, Ankara, Turkey
(Under the supervision of Assoc. Prof. Goknur Cambaz Buke)
Special Success Scholar
GPA: 3.93/4.00
- 2019 – 2022 B.S. (Double Major) Mechanical Engineering Department, TOBB University of Economics and Technology, Ankara, Turkey
GPA: 3.33/4.00
- 2016 – 2021 B.S. Materials Science and Nanotechnology Engineering Department, TOBB University of Economics and Technology, Ankara, Turkey
Undergraduate Researcher at TOBB ETU Nanomaterials Group (Under the supervision of Assoc. Prof. Goknur Cambaz Buke)
GPA: 3.73/4.00

EMPLOYMENT EXPERIENCE

- 2021 Sep–2023 Sep TOBB ETU, Ankara, Turkey
(Research & Teaching Assistant) Graduate School of Engineering and Science – Micro and Nanotechnology Department
Given Lectures: Industrial Materials and Production Methods Laboratory (MBN206L), General Chemistry Laboratory (KIM101L), Material Science Laboratory (MBN201L)
- 2021 Aug-Sep TOBB ETU, Ankara, Turkey
(Internship) Nanomaterials Group-US Air Force Office of Scientific Research Project
Project: Formation and Characterization of 2D Metal Carbides
Project PI: Assoc. Prof. Goknur Cambaz Buke
- 2021 Jan-Jul TOBB ETU, Ankara, Turkey
(Internship) Nanomaterials Group–TUBITAK 1003 Primary Subjects R&D Funding Program
Project: Synthesis and Characterization of Graphene Encapsulated Metal Particles for Electromagnetic Interference Shielding and Heat Dissipation Applications
Project PI: Assoc. Prof. Goknur Cambaz Buke
- 2020 Sep-Dec TOBB ETU, Ankara, Turkey
(Internship) Nanomaterials Group-US Air Force Office of Scientific Research Project
Project: Formation and Characterization of 2D Metal carbides
Project PI: Assoc. Prof. Goknur Cambaz Buke

2020 August-Sep (Internship) TUBITAK Space Technologies Research Institute, Ankara, Turkey
OPMER Laboratories

2019 May-August (Internship) ARÇELİK Inc., Tuzla, İstanbul
Central Research & Development Department
Material Technologies Department Polymer & Chemistry Team

CONFERENCES

- **D. Cakir**, O. Caylan, T. Turkoglu, O. Akgun, G. Dugan, H. Tugrul, B. Kockar, G. Cambaz Buke “The Synthesis and Characterization of Graphene Encapsulated Copper (G Encap. Cu) Powders via Rotating PECVD”, MRS 2022 Fall Meeting, Nov-Dec 2022, Boston, USA (Poster Presentation)
- **D. Cakir**, O. Caylan, T. Turkoglu, O. Akgun, G. Dugan, H. Tugrul, B. Kockar, G. Cambaz Buke, “The Synthesis and Characterization of Graphene Encapsulated Copper (G Encap. Cu) Powders via Rotating PECVD”, IMMC 2022, Istanbul, Turkiye, October 2022 (Oral Presentation)
- **D. Cakir**, O. Caylan, O. Akgun, G. Dugan, H. Tugrul, B. Kockar, G. Cambaz Buke “The Synthesis and Characterization of Graphene Encapsulated Cu Powders via PECVD”, NanoTR 16, September 2022, METU, Ankara, Turkey (Oral Presentation)
- B. Incecik, O. Caylan, T. Turkoglu, **D. Cakir**, E. Atli, G. Cambaz Buke “Synthesis, Characterization and EMI Shielding Effectiveness of Graphene Encapsulated Nickel/Epoxy Composites NanoTR 16, September 2022, METU, Ankara, Turkey (Oral Presentation)
- **D. Cakir**, O. Caylan, O. Akgun, G. Dugan, H. Tugrul, B. Kockar, G. Cambaz Buke “The Synthesis and Characterization of Homogeneous High-Quality Graphene Encapsulated Metallic Powders via Plasma Enhanced Rotating CVD”, MRS 2022 Spring Meeting, May 2022, Hawaii, USA (Poster Presentation)
- O. Caylan, F. Turker, D. Karadeniz, T. Turkoglu, **D. Cakir**, G. Cambaz Buke “Synthesis and Characterization of 2D Mo2C Crystals and Graphene Heterostructures Through CVD” MRS 2022 Spring Meeting, May 2022, Hawaii, USA (Oral Presentation)
- B. Incecik, O. Caylan, T. Turkoglu, **D. Cakir**, E. Atli “Synthesis, Characterization and EMI Shielding Effectiveness of Graphene Encapsulated Nickel/Epoxy Composites”, INERS 2022, 4th International Engineering Research Symposium, March 2022 (Oral Presentation)

PROJECTS

2019 – 2020 TUBITAK 2209-A Research Project Support Program for Undergraduate Students
Investigation of Mechanical and Thermal Properties of Graphene Reinforced Polypropylene Nanocomposites

AWARDS & HONORS

- 2023 – Drexel University George Hill Award
- 2022 – Fulbright Scholarship, PhD Student Core Program
- 2022 – TOBB University of Economics and Technology Special Success Award

FURTHER SKILLS

- IT:
 - MS Office (Word, Excel, PowerPoint): Advanced
 - CAD Programs (AutoCAD, Solid, Fusion360): Intermediate
 - Software Program C: Beginner
 - Software Program MathCAD: Beginner
 - Modelling Program HyperChem: Beginner
- Language:
 - TOEFL 88/120 (Nov 2022)
 - IELTS, 6,5/9 points (April 2022)

REFERENCES

- **Assoc. Prof. Goknur Buke**
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- **Ahmet Nuri Akay**
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- **Asst. Prof. Zeynep Tutumlu**
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- **Assoc. Prof. Recep M. Gorgularslan**
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