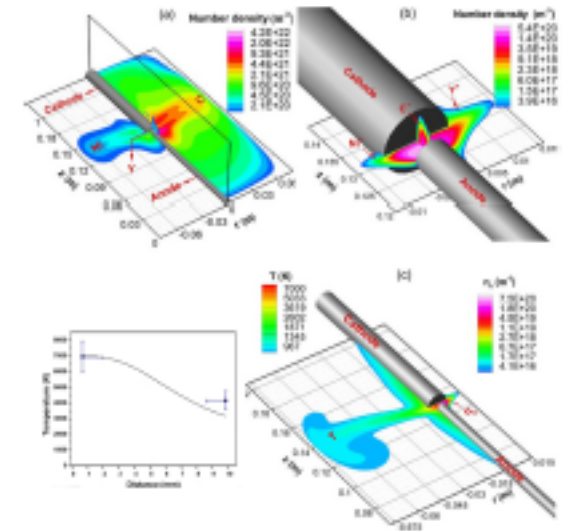
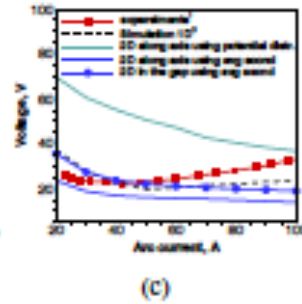
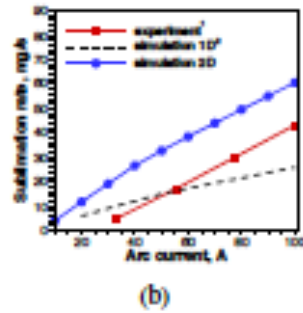
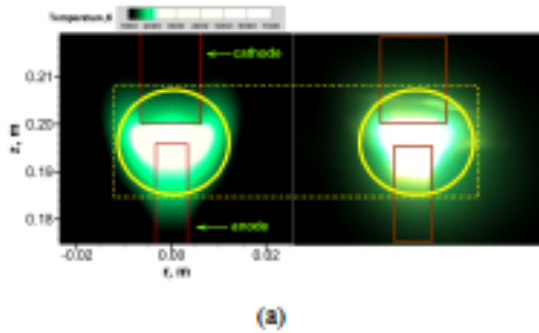


Project GWU # 2

- **Title:** Plasma Simulation Validation
- **PI(s):** Michael Keidar and Carles Corbella, George Washington University
- **Need and Relevance:** validation of new codes for high-pressure plasma processing, nanoparticle synthesis
- **Goals:** to develop plasma diagnostics for code validations
- **Approach:** develop new diagnostics, hypothesis and validation
- **Outcomes/Deliverables:** diagnostics, code validation
- **Project Duration, Budget:** 2 years / \$50k/year

Need and Relevance



Goals



High Pressure Plasma Energy,
Agriculture, and Biomedical Technologies



Approach



High Pressure Plasma Energy,
Agriculture, and Biomedical Technologies



Outcomes/Deliverables



High Pressure Plasma Energy,
Agriculture, and Biomedical Technologies



THE GEORGE
WASHINGTON
UNIVERSITY
WASHINGTON, DC



Project Timeline and Duration

| Task / month | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|----|----|----|
| Experiments with pulsed arc | x | x | x | x | | | | | | | | |
| Plasma parameters measurements (Langmuir probe) | | | | x | x | x | x | | | | | |
| Optical diagnostics | | | | | | | x | x | x | x | | |
| TechX Code validation for various electrode materials | | | | | | | | | x | x | x | x |

Project Budget

| Item | Cost |
|-----------------------|------------------|
| Post-doc support | \$ 35,000.00 |
| Supplies | \$ 7,000.00 |
| Purchased services | \$ 0.00 |
| Equipment | \$ 0.00 |
| Travel | \$ 3,000.00 |
| Project total* | \$ 45,000 |