

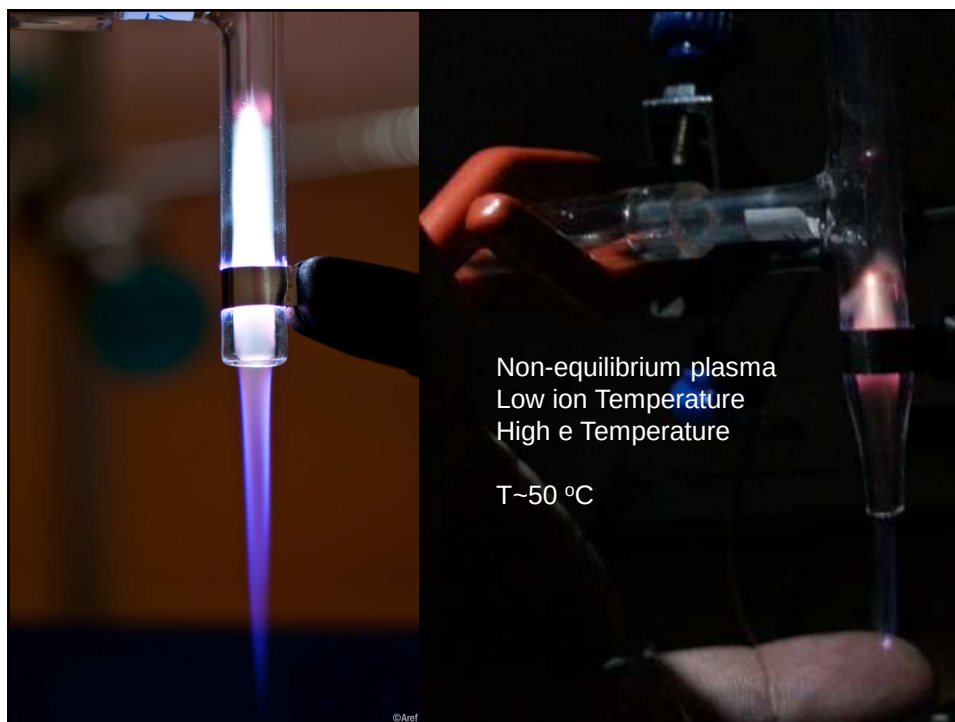


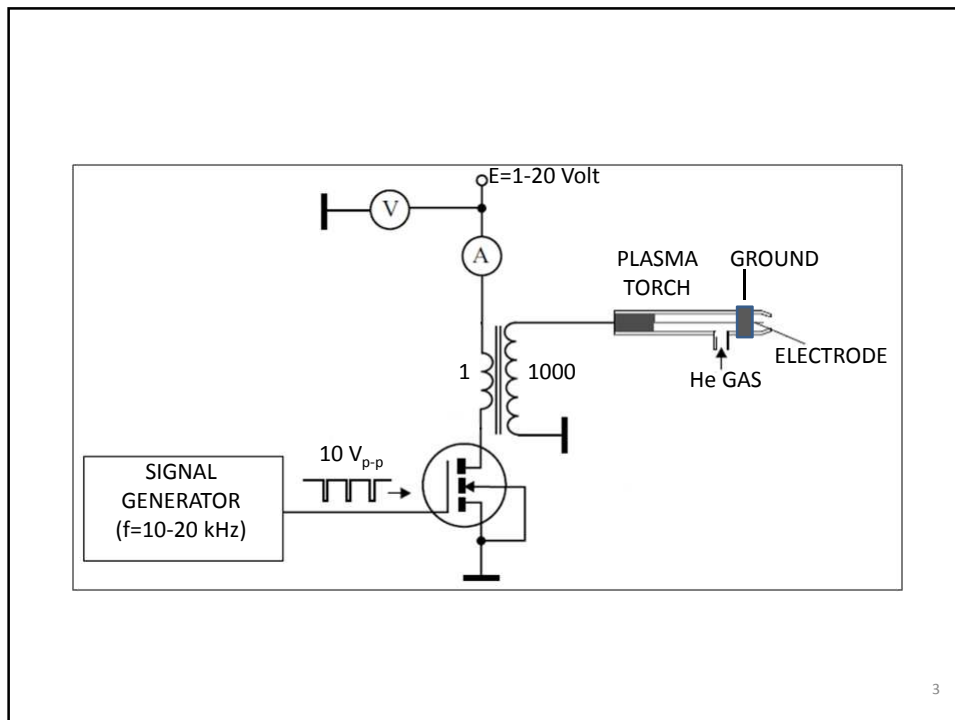
Reactivity Zones around Atmospheric Pressure Plasma Jets

Özgür BİRER

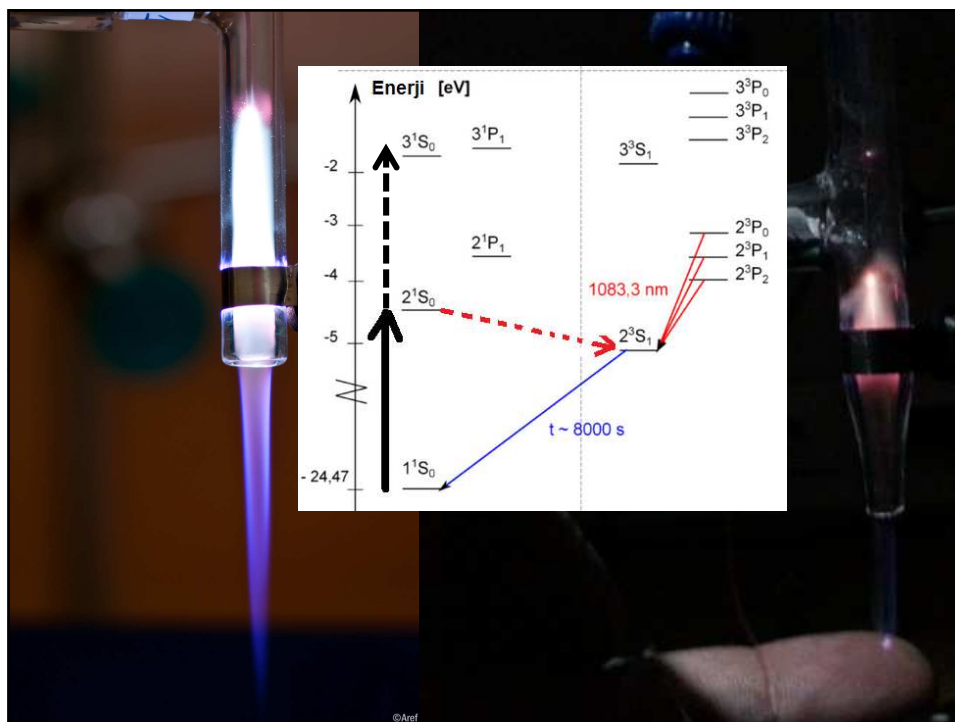
Department of Chemistry
Koç University
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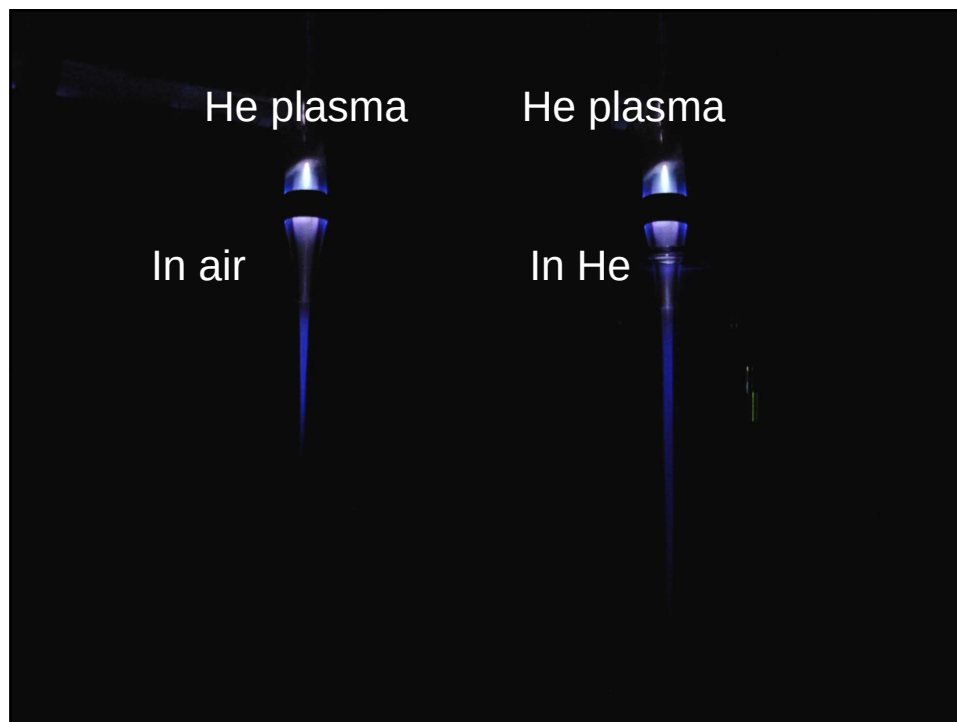
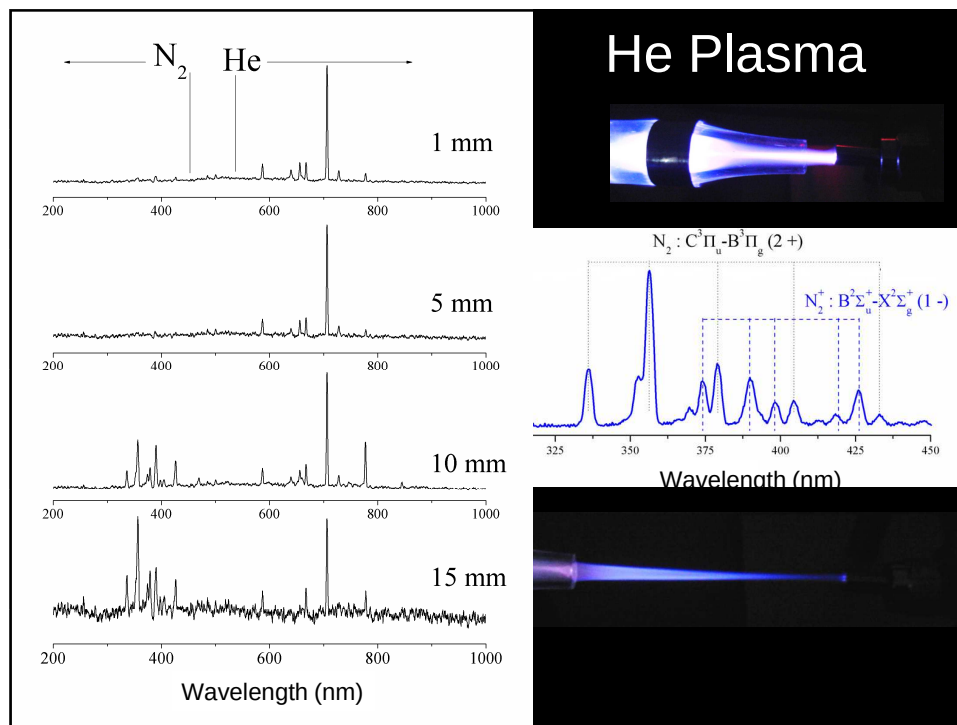
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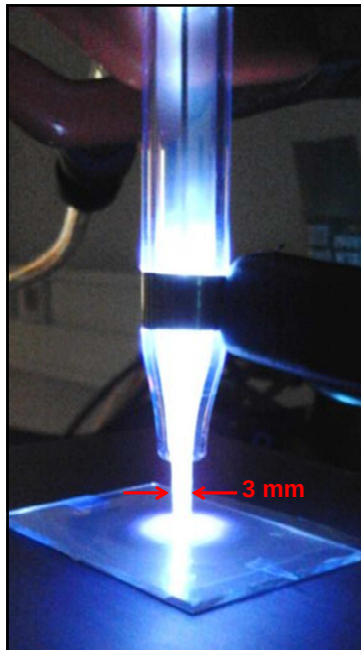




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Surface Modifications

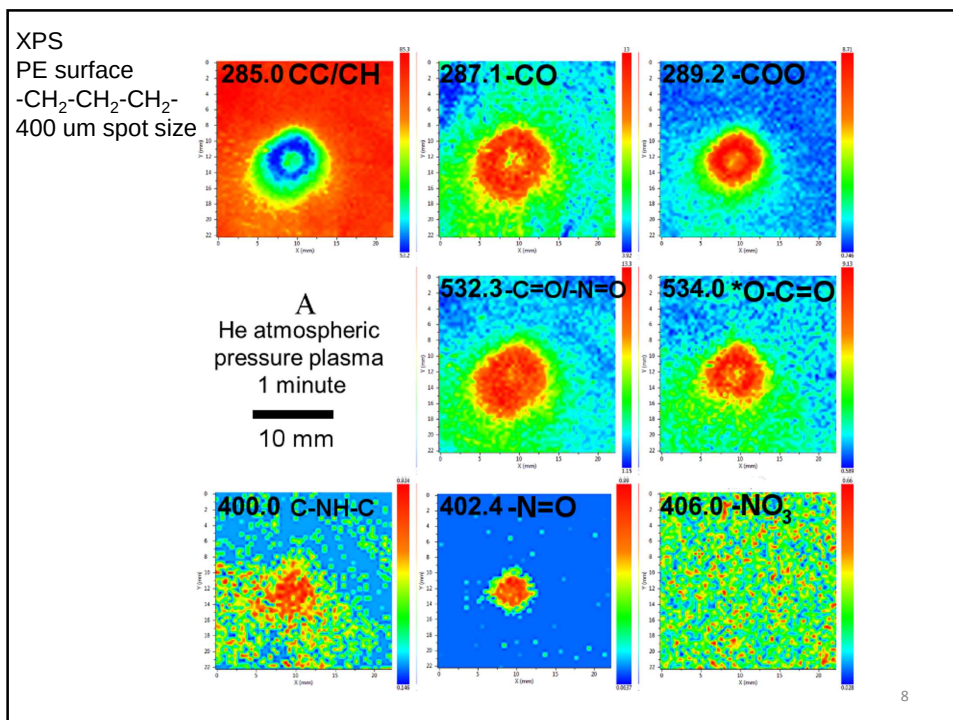
Are reactive species created

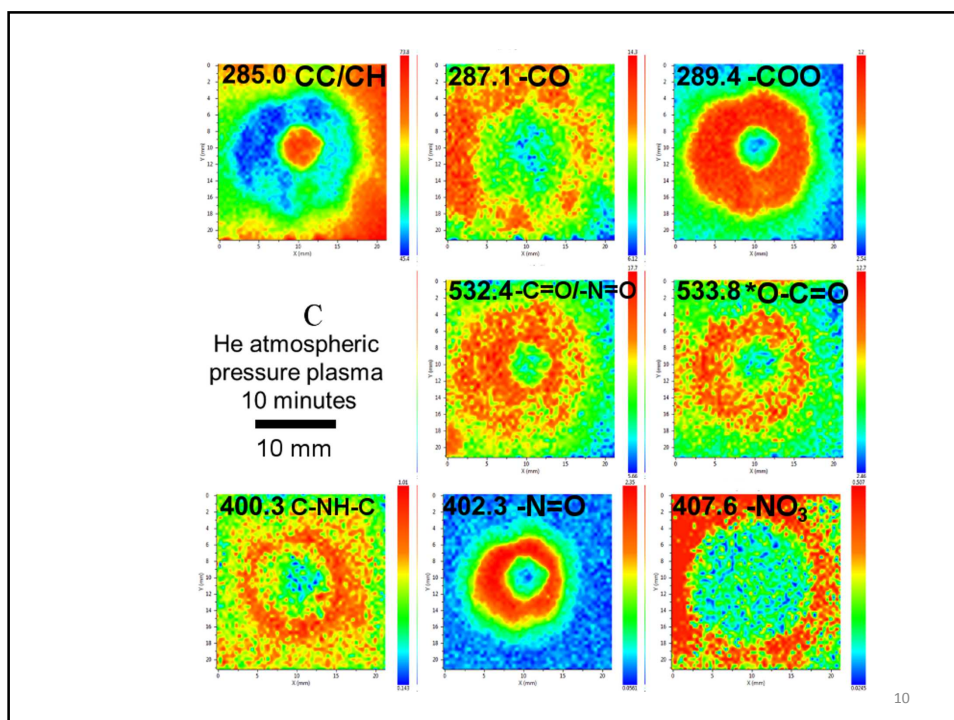
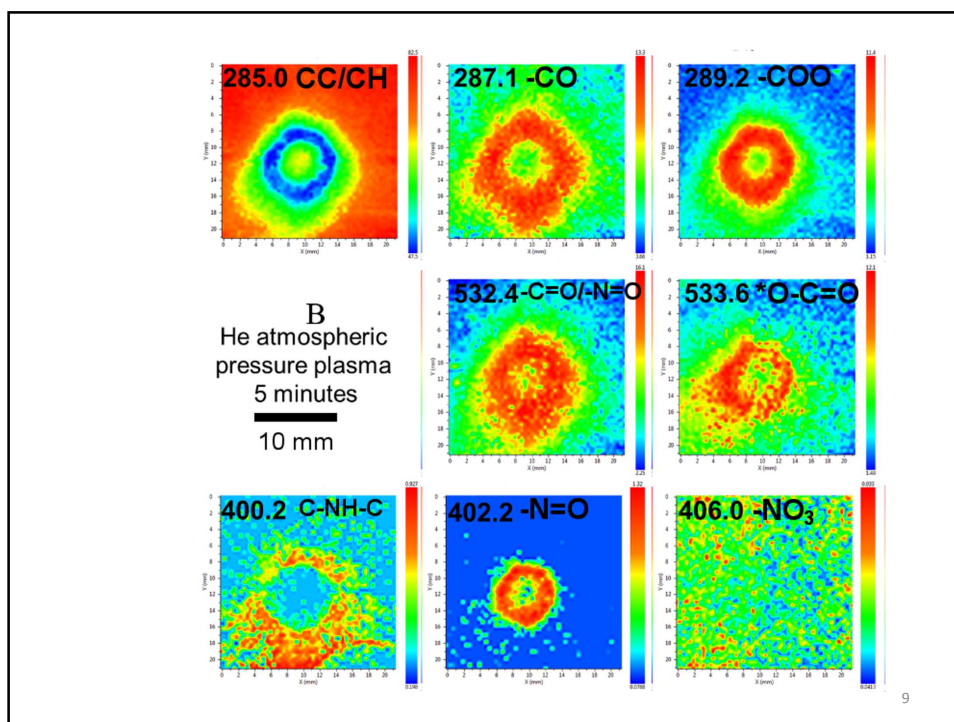
❖ on the surface?

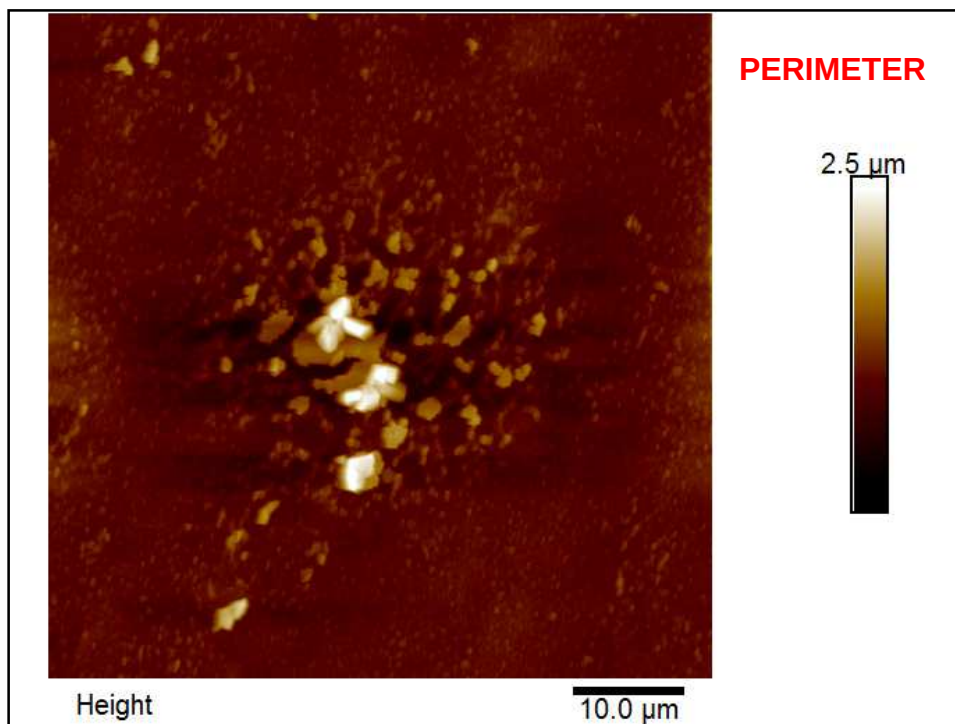
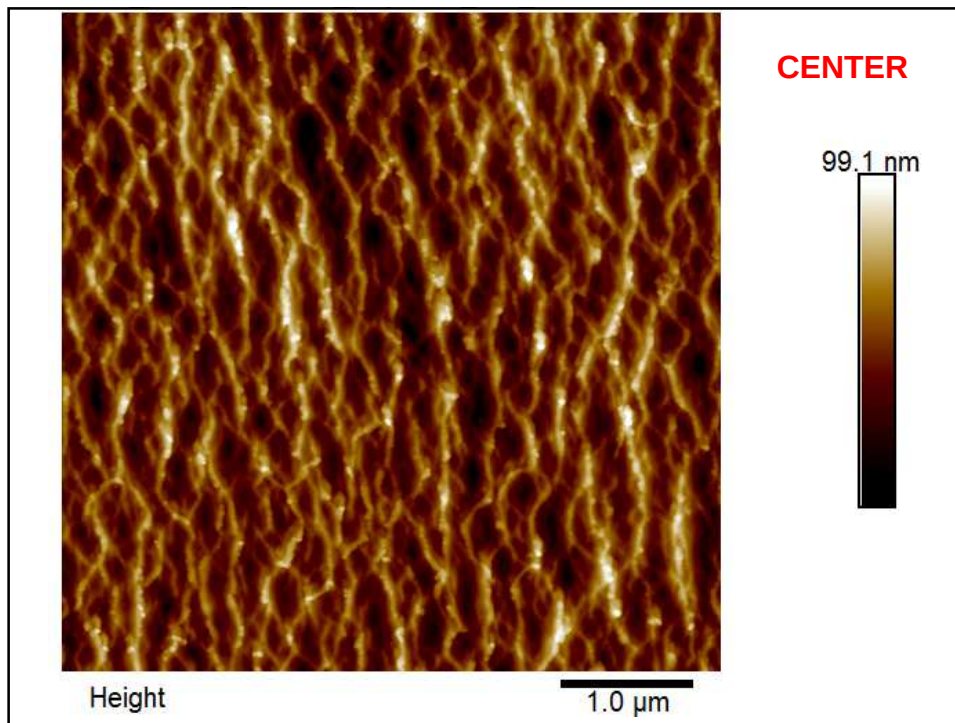
❖ in the plasma ?

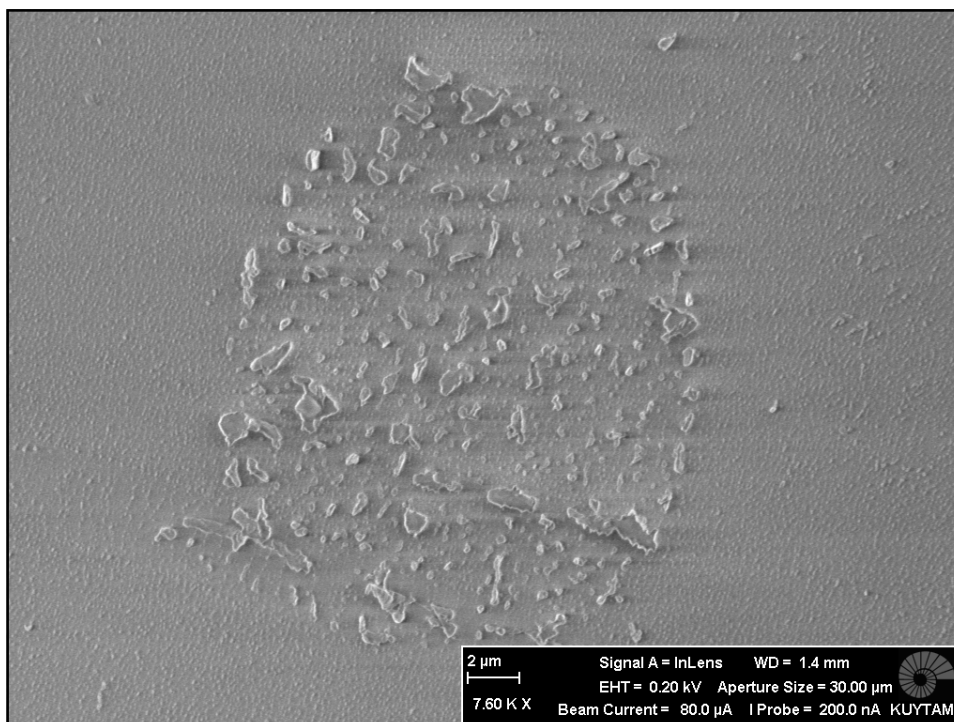
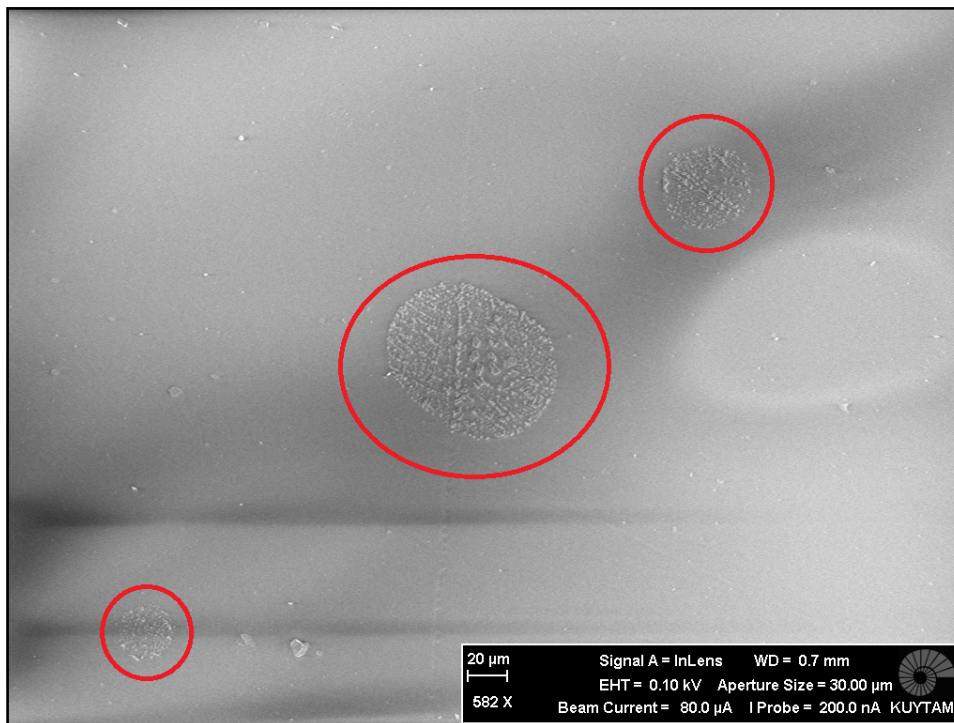
- Metastable He* (2^3S_1 , ~20 eV)
- Fast electrons
- Deep UV photons

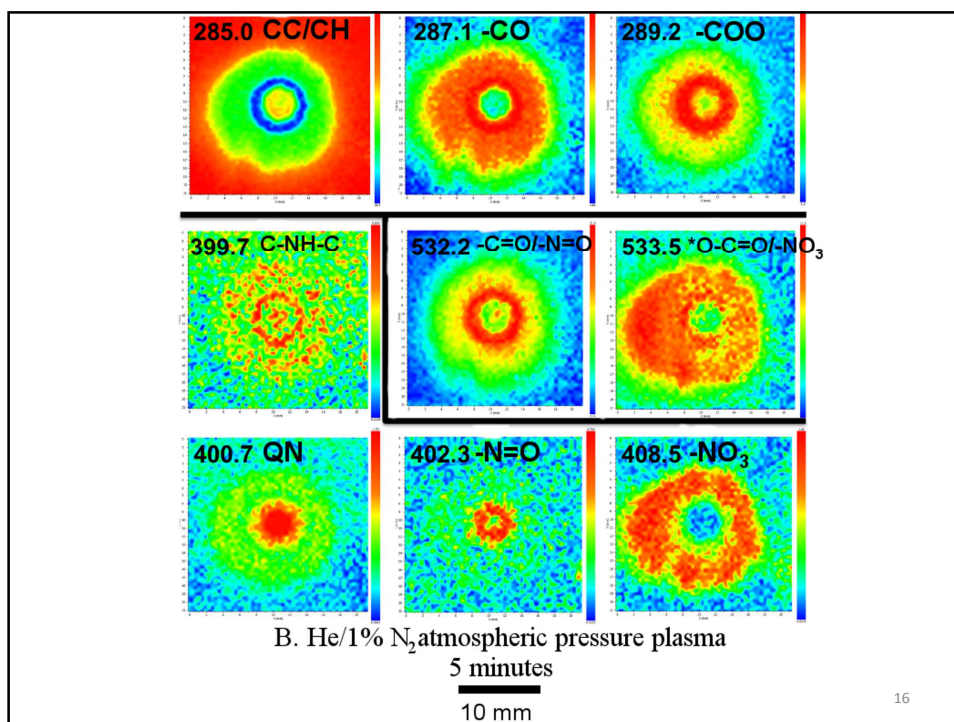
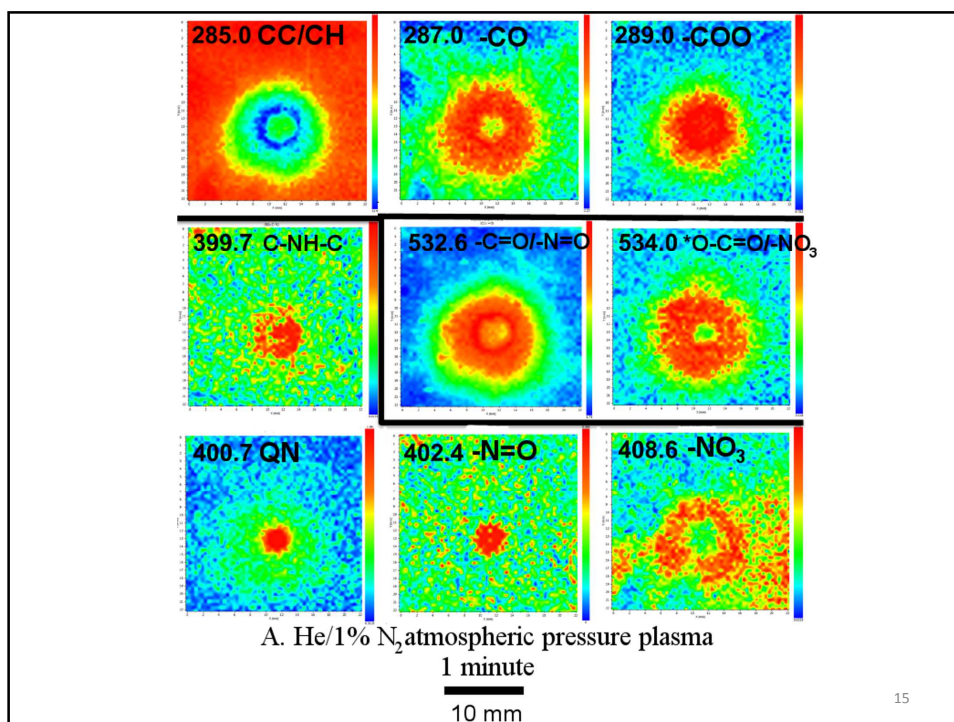
Applied Surface Science 354 (2015) 420–428

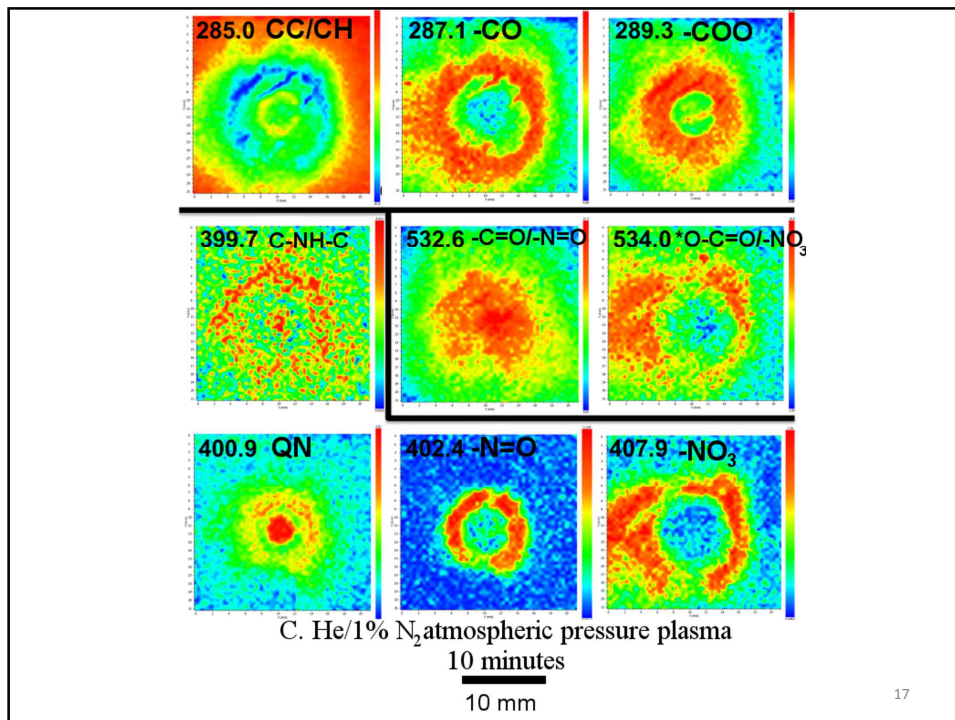












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Open Questions

- Relationship between gas phase chemistry and surface reactions?
- Polymer chemistry, crystallinity, tacticity, alignment of polymer chains?
- Higher spatial resolution?
- *In-situ* plasma treatment? Controlled atmosphere?
- Ambient XPS? Time resolved/synchronized (tens of kHz)?

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