

Stanford



Jörgen Gladh

Postdoctoral Research Fellow, Photon Science, SLAC

Bio

BIO

Jörgen has a PhD in chemical physics. His educational background is as a graduated engineer in technical physics, which he received at Karlstad University, Sweden before he did his PhD, at Stockholm University, Sweden. After his PhD he worked for ~2 years in Anders Nilsson's research group at Stockholm University before he came here to Stanford to join Tony F. Heinz's research group. His research has been around heterogeneous catalysis on surfaces, and is also the subject for the project that he is working on here at Stanford and SLAC.

PROFESSIONAL EDUCATION

- Doctor of Philosophy, Stockholms Universitet (2017)
- M.Sc., Karlstad University, Graduated Engineer in Technical Physics (2007)

STANFORD ADVISORS

- Tony Heinz, Postdoctoral Faculty Sponsor

Publications

PUBLICATIONS

- **Time-resolved observation of transient precursor state of CO on Ru(0001) using carbon K-edge spectroscopy.** *Physical chemistry chemical physics : PCCP*
Wang, H. Y., Schreck, S., Weston, M., Liu, C., Ogasawara, H., LaRue, J., Perakis, F., Dell'Angela, M., Capotondi, F., Giannessi, L., Pedersoli, E., Naumenko, D., Nikolov, et al
2019
- **Indication of non-thermal contribution to visible femtosecond laser-induced CO oxidation on Ru(0001)** *JOURNAL OF CHEMICAL PHYSICS*
Oberg, H., Gladh, J., Marks, K., Ogasawara, H., Nilsson, A., Pettersson, L. G., Ostrom, H.
2015; 143 (7)
- **Detection of adsorbate overlayer structural transitions using sum-frequency generation spectroscopy** *SURFACE SCIENCE*
Gladh, J., Oberg, H., Pettersson, L. M., Ostrom, H.
2015; 633: 77–81
- **Probing the transition state region in catalytic CO oxidation on Ru** *SCIENCE*
Ostrom, H., Oberg, H., Xin, H., LaRue, J., Beye, M., Dell'Angela, M., Gladh, J., Ng, M. L., Sellberg, J. A., Kaya, S., Mercurio, G., Nordlund, D., Hantschmann, et al
2015; 347 (6225): 978-982
- **Electron- and phonon-coupling in femtosecond laser-induced desorption of CO from Ru(0001)** *SURFACE SCIENCE*
Gladh, J., Hansson, T., Ostrom, H.
2013; 615: 65–71

- **Real-time observation of surface bond breaking with an x-ray laser.** *Science*
Dell'Angela, M., Anniyev, T., Beye, M., Coffee, R., Föhlisch, A., Gladh, J., Katayama, T., Kaya, S., Krupin, O., LaRue, J., Møgelhøj, A., Nordlund, D., Nørskov, et al
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- **A high-pressure x-ray photoelectron spectroscopy instrument for studies of industrially relevant catalytic reactions at pressures of several bars** *The Review of Scientific Instruments*
Amann, P., Degerman, D., Lee, M., Alexander, J. D., Shipilin, M., Wang, H., Cavalca, F., Weston, M., Gladh, J., Blom, M., Björkhage, M., Löfgren, P., Schlueter, et al
2019; 90: 103102
- **Catalysis in real time using X-ray lasers** *CHEMICAL PHYSICS LETTERS*
Nilsson, A., LaRue, J., Oberg, H., Ogasawara, H., Dell'Angela, M., Beye, M., Ostrom, H., Gladh, J., Nørskov, J. K., Wurth, W., Abild-Pedersen, F., Pettersson, L. G.
2017; 675: 145-173
- **Chemical Bond Activation Observed with an X-ray Laser** *JOURNAL OF PHYSICAL CHEMISTRY LETTERS*
Beye, M., Oberg, H., Xin, H., Dakovski, G. L., Dell'Angela, M., Foehlich, A., Gladh, J., Hantschmann, M., Hieke, F., Kaya, S., Kuehn, D., LaRue, J., Mercurio, et al
2016; 7 (18): 3647-3651
- **Optical laser-induced CO desorption from Ru(0001) monitored with a free-electron X-ray laser: DFT prediction and X-ray confirmation of a precursor state** *SURFACE SCIENCE*
Oberg, H., Gladh, J., Dell'Angela, M., Anniyev, T., Beye, M., Coffee, R., Foehlich, A., Katayama, T., Kaya, S., LaRue, J., Mogelhoj, A., Nordlund, D., Ogasawara, et al
2015; 640: 80-88
- **Strong Influence of Coadsorbat Interaction on CO Desorption Dynamics on Ru(0001) Probed by Ultrafast X-Ray Spectroscopy and Ab Initio Simulations** *PHYSICAL REVIEW LETTERS*
Xin, H., LaRue, J., Oberg, H., Beye, M., Dell'Angela, M., Turner, J. J., Gladh, J., Ng, M. L., Sellberg, J. A., Kaya, S., Mercurio, G., HIEKE, F., Nordlund, et al
2015; 114 (15)
- **Vacuum space charge effects in sub-picosecond soft X-ray photoemission on a molecular adsorbate layer** *STRUCTURAL DYNAMICS*
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2015; 2 (2)
- **Unique water-water coordination tailored by a metal surface** *JOURNAL OF CHEMICAL PHYSICS*
Schiros, T., Andersson, K. J., MacNaughton, J., Gladh, J., Matsuda, A., Ostrom, H., Takahashi, O., Pettersson, L. G., Nilsson, A., Ogasawara, H.
2013; 138 (23)
- **Selective Ultrafast Probing of Transient Hot Chemisorbed and Precursor States of CO on Ru(0001)** *PHYSICAL REVIEW LETTERS*
Beye, M., Anniyev, T., Coffee, R., Dell'Angela, M., Foehlich, A., Gladh, J., Katayama, T., Kaya, S., Krupin, O., Mogelhoj, A., Nilsson, A., Nordlund, D., Nørskov, et al
2013; 110 (18)
- **Ultrafast soft X-ray emission spectroscopy of surface adsorbates using an X-ray free electron laser** *JOURNAL OF ELECTRON SPECTROSCOPY AND RELATED PHENOMENA*
Katayama, T., Anniyev, T., Beye, M., Coffee, R., Dell'Angela, M., Foehlich, A., Gladh, J., Kaya, S., Krupin, O., Nilsson, A., Nordlund, D., Schlotter, W. F., Sellberg, et al
2013; 187: 9-14
- **Adsorption and Cyclotrimerization Kinetics of C₂H₂ at a Cu(110) Surface** *JOURNAL OF PHYSICAL CHEMISTRY C*
Oberg, H., Nestsiaenka, Y., Matsuda, A., Gladh, J., Hansson, T., Pettersson, L. M., Ostrom, H.
2012; 116 (17): 9550-60
- **X-ray emission spectroscopy and density functional study of CO/Fe(100)** *JOURNAL OF CHEMICAL PHYSICS*
Gladh, J., Oberg, H., Li, J., Ljungberg, M. P., Matsuda, A., Ogasawara, H., Nilsson, A., Pettersson, L. G., Ostrom, H.
2012; 136 (3)