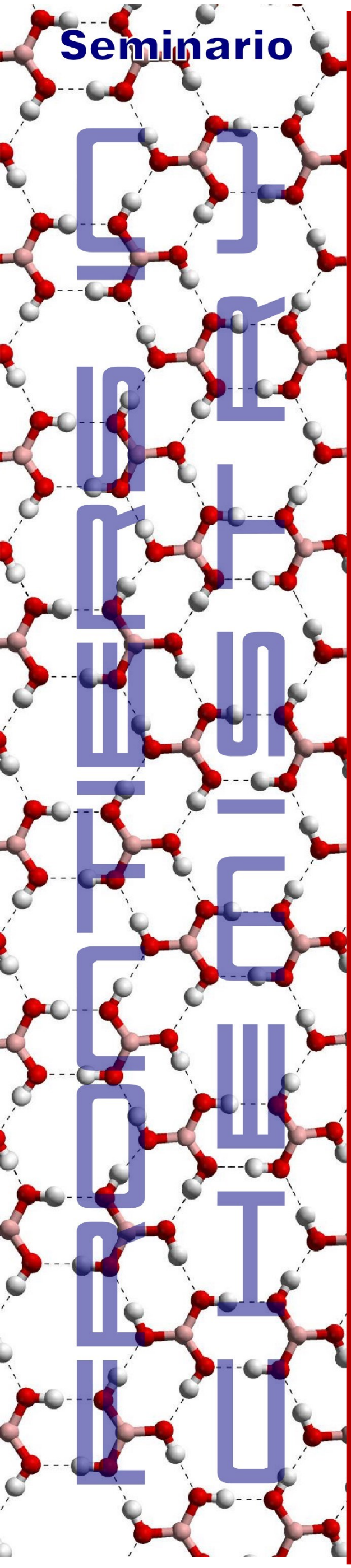

Università degli Studi di Padova
Dipartimento di Scienze Chimiche

Società Chimica Italiana
Sezione Veneto

Ciclo di Seminari 'Frontiers in Chemistry'

Prof. Federico Bianchi

Institute for Atmospheric and Earth System Research (INAR)
Polar and arctic atmospheric research (PANDA)
University of Helsinki, Finland
federico.bianchi@helsinki.fi

New particle formation around the globe
From laboratory experiments to the Everest Base Camp

mercoledì 17 novembre 2021, ore 14.30
Aula I del Dip. Scienze Chimiche

Zoom meeting, ID: 763 282 419
https://unipd.zoom.us/j/763282419

Atmospheric aerosols affect the climate directly by absorbing or scattering incoming radiation and also indirectly by acting as cloud condensation nuclei (CCN) changing therefore the cloud albedo. A major fraction of these CCN comes from gas to particle conversion (nucleation). During the last decade, several nucleation studies have been published based on field observations, however most of them in the planetary boundary layer. Therefore, only little information is available about the free troposphere. The aim of this seminar is to elucidate the last founding about what species contribute to new particle formation (NPF) at high altitude. In this seminar, prof. Bianchi will show results of new particle formation events directly observed at the Swiss high alpine research station Jungfraujoch (3580 m asl), at the Himalayan Nepal Climate Observatory Pyramid (NCO-P) site on the southern slope of the Himalayas, not far from Everest base camp (5079 m asl) and at the Chacaltaya GAW Station (CHC), located in the Bolivian Andes (5240 m asl).

Federico Bianchi, graduated in chemistry from University of Milan, received his Ph.D. in atmospheric chemistry from the Eidgenössische Technische Hochschule (ETH) Zürich (2014). In 2017, he received the Arne Richter Award for Outstanding Early Career Scientists given by the European Geosciences Union. After being awarded with an ERC Starting Grant in 2019, he was appointed as Associate Professor on atmosphere and cryosphere interactions at the University of Helsinki. His research interests are the formation of new particles in extreme environments, from pristine free troposphere to polluted megacities. Currently, his group is focusing on understanding preindustrial atmosphere and the influence of biogenic highly oxygenated organic molecules on aerosol formation.

La presenza della S.V. sarà molto gradita

Prof. Michele Maggini
Direttore del Dipartimento di Scienze Chimiche

Prof.ssa Sara Bogialli
Presidentessa SCI-Veneto

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