

## After the Mobility

**Table D - Traineeship Certificate by the Receiving Organisation/Enterprise**

<b>Name of the trainee:</b> Saurabh Annadate
<b>Name of the Receiving Organisation/Enterprise:</b> University of Vienna
<b>Sector of the Receiving Organisation/Enterprise:</b> Department of Meteorology and Geophysics
<b>Address of the Receiving Organisation/Enterprise</b> [street, city, country, phone, e-mail address], <b>website:</b> UZA II, Josef-Holaubek-Platz 2, 1090 Vienna. img-wien@univie.ac.at
<b>Start date and end date of the complete traineeship (incl. virtual component, if applicable):</b> from [day/month/year] ..... to [day/month/year] ..... <b>Start date and end date of physical mobility:</b> from [day/month/year] ...01/03/2023.... to [day/month/year] ...30/09/2023....
<b>Traineeship title:</b> Wet scavenging parameter optimization for black carbon in the FLEXPART model.
<b>Detailed programme of the traineeship period including tasks carried out by the trainee:</b> <p>Black carbon (BC) plays a significant role in global warming owing to its optical and radiative properties. Consequently, accurately identifying various sources of BC and their emissions is vital for implementing effective mitigation strategies. The focus of this internship was improving the wet deposition scheme for black carbon within dispersion model, FLEXPART. The trainee learned to run the FLEXPART model. He ran the model for various observation sites in Europe. He modified the source code to obtain various deposition sensitivities for optimization. He developed an algorithm for optimizing the scavenging coefficients along with prior emissions.</p>
<b>Knowledge, skills (intellectual and practical) and competences acquired (achieved Learning Outcomes):</b> <ul style="list-style-type: none"> <li>• Understanding of FLEXPART model source code especially, the wet deposition scheme.</li> <li>• Better understanding of wet scavenging scheme for black carbon in FLEXPART.</li> <li>• Learned Black carbon emission quantification and source region identification using FLEXINVERT+.</li> <li>• Started to develop wet scavenging parameter optimization algorithm for black carbon in FLEXINVERT+ setup.</li> </ul>
<b>Evaluation of the trainee:</b> <p>Satisfactory.</p>
<b>Date:</b>
<b>Name and signature of the Supervisor at the Receiving Organisation/Enterprise:</b>