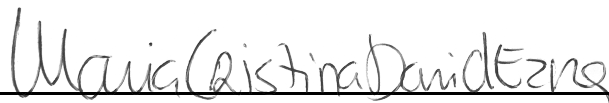


Maria Cristina De Oliveira Santos Matos David Ezra, Head of Graduation Academic Unit of Instituto Superior Técnico, Universidade de Lisboa certifies that:

**Manuel Peraboa Leite Ramalho Pinho**, holder of the Identity Card No. 15716285, born in Vila Franca de Xira and of PORTUGUESE nationality, obtained the degree of Mestre in Chemical Engineering in the INTEGRATED MASTER DEGREE (MSC) in CHEMICAL ENGINEERING, on the 25th of November of 2021, with the final mark of 17 (seventeen) points, on a scale of 0 - 20, having been approved in the following curricular units.

Registration Certificate number 17739/IST/M/2022.



**Maria Cristina De Oliveira Santos Matos David Ezra**

Head of Graduation Academic Unit

Instituto Superior Técnico, Lisboa, on the 13th of April of 2022.

Curricular Unit	ECTS	Grade
<b>INTEGRATED CHEMICAL ENGINEERING</b>	6	15 (fifteen) points
<b>PROCESS ENGINEERING OPERATIONS MANAGEMENT</b>	3	16 (sixteen) points
<b>CHEMICAL ENGINEERING LABORATORY II</b>	6	16 (sixteen) points
<b>SEPARATION PROCESS II</b>	4.5	14 (fourteen) points
<b>BIOTECHNOLOGY</b>	3	17 (seventeen) points
<b>ADVANCED TRANSPORT PHENOMENA</b>	6	16 (sixteen) points
<b>CHEMICAL ENGINEERING LABORATORY III</b>	3	17 (seventeen) points
<b>CHEMICAL REACTION ENGINEERING II</b>	6	15 (fifteen) points
<b>PROCESS OPTIMISATION</b>	6	16 (sixteen) points
<b>ENVIRONMENTAL TECHNOLOGY</b>	4.5	19 (nineteen) points
<b>ADVANCED PROCESS CONTROL</b>	6	19 (nineteen) points
<b>CHEMICAL ENGINEERING PROJECT I</b>	6	16 (sixteen) points
<b>PROCESS SYNTHESIS AND INTEGRATION</b>	6	14 (fourteen) points
<b>CHEMICAL ENGINEERING PROJECT II</b>	18	17 (seventeen) points
<b>INDUSTRIAL CHEMISTRY</b>	6	14 (fourteen) points
<b>MASTER DISSERTATION IN CHEMICAL ENGINEERING</b>	30	19 (nineteen) points