

## Supporting Information

# Overview of Sterilization Methods for UHMWPE through Surface Analysis

Melissa Machado Rodrigues<sup>a,\*</sup>, Estela K. Kerstner Baldin<sup>a,d</sup>, Cristian Padilha Fontoura<sup>a,\*</sup>, Leonardo Mathias Leidens<sup>a</sup>, Rodrigo Antônio Barbieri<sup>c</sup>, Rafaële Frassini<sup>b</sup>, Celia de Fraga Malfatti<sup>d</sup>, Mariana Roesch-Ely<sup>b</sup>, Carlos Alejandro Figueroa<sup>a</sup>, Cesar Aguzzoli<sup>a</sup>

<sup>a</sup> Área do Conhecimento de Ciências Exatas e Engenharias, PPGMAT, Universidade de Caxias do Sul, Caxias do Sul, RS 95070-560, Brazil.

<sup>b</sup> Instituto de Biotecnologia, Universidade de Caxias do Sul, Caxias do Sul, RS 95070-560, Brazil.

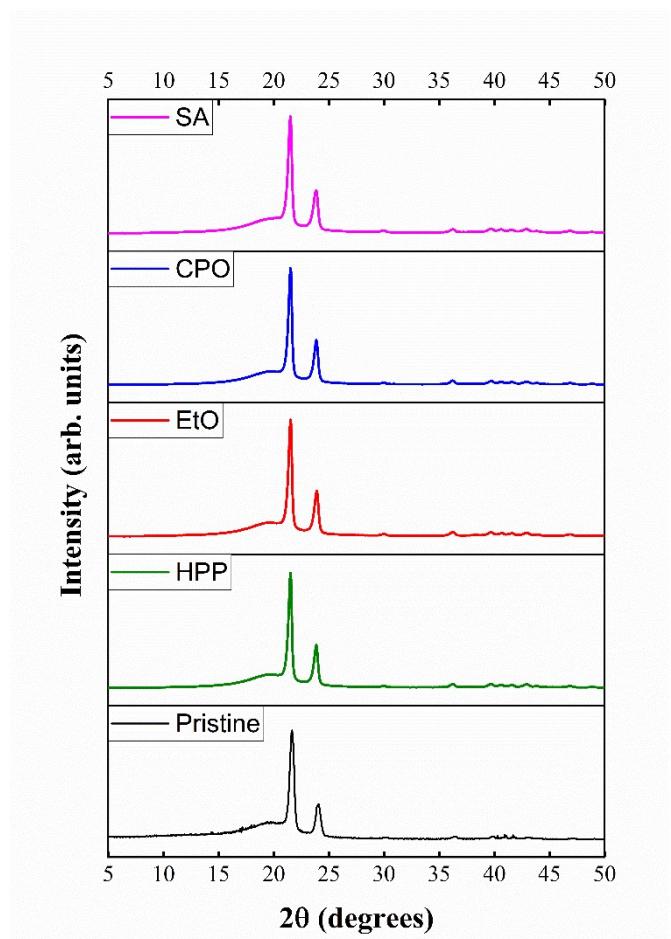
<sup>c</sup> Laboratório Central de Microscopia - LCMIC, Universidade de Caxias do Sul, Caxias do Sul, RS 95070-560, Brazil

<sup>d</sup> Laboratório de Pesquisa em Corrosão (LAPEC), Universidade Federal do Rio Grande do Sul (UFRGS), Porto Alegre 9500, RS 91501-970, Brazil

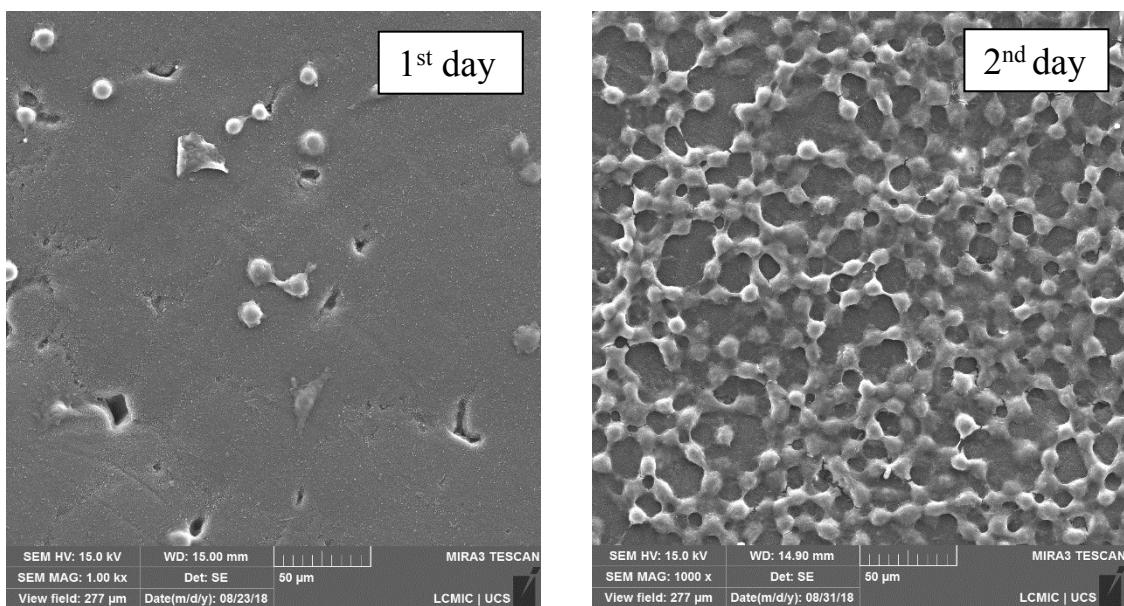
**\*Corresponding author:** cpfontoura@ucs.br; melissa1807@gmail.com

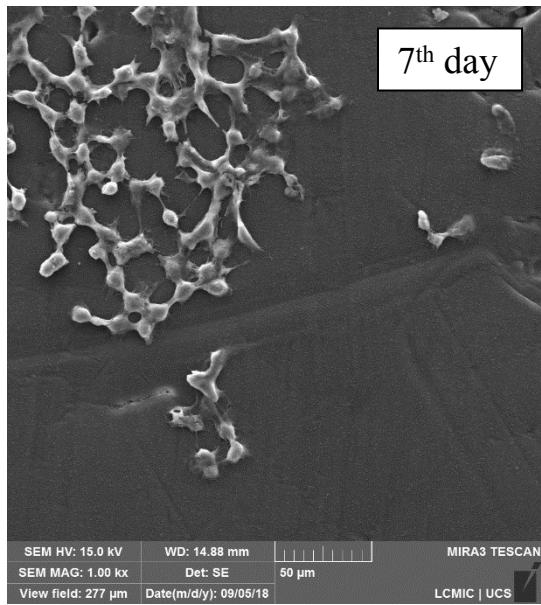
## 3. Results and Discussion

Figures A1, A2, A3, A4 and A5 below are mentioned in the results and discussions of the article.

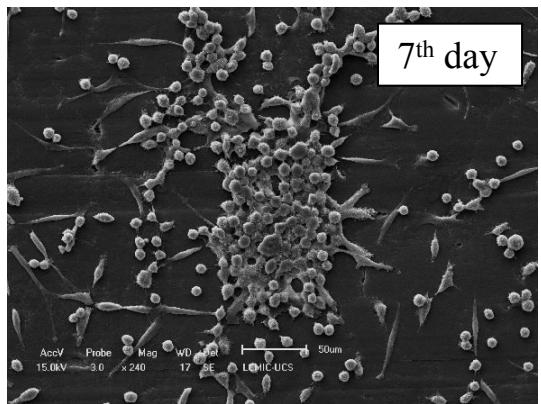
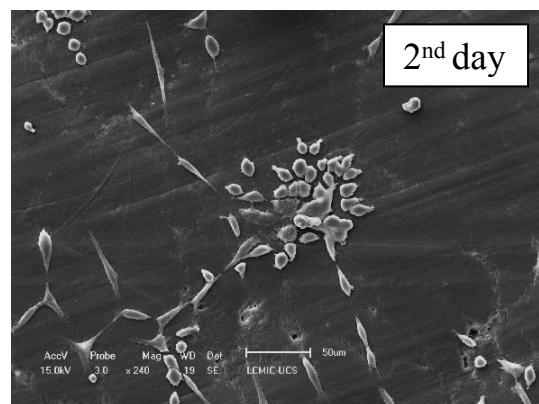
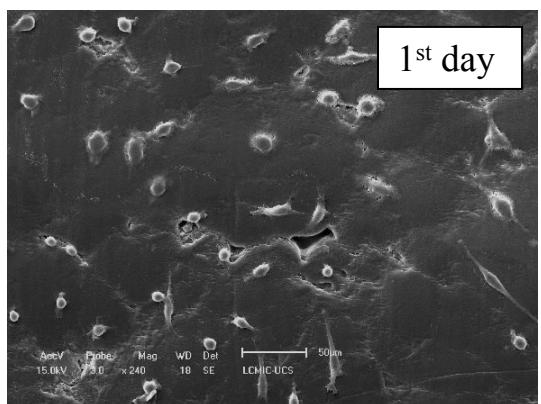


**Figure A1.** Diffractions patterns used for the estimation of crystallinity on the set of samples.

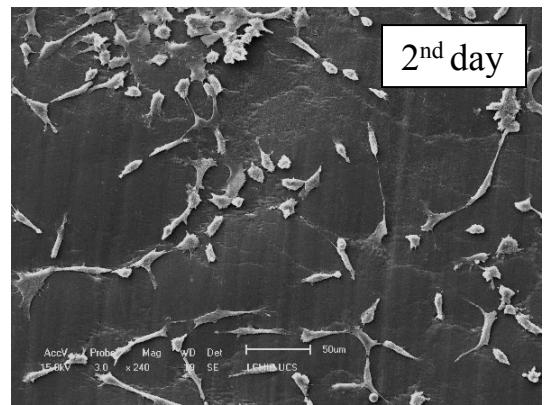
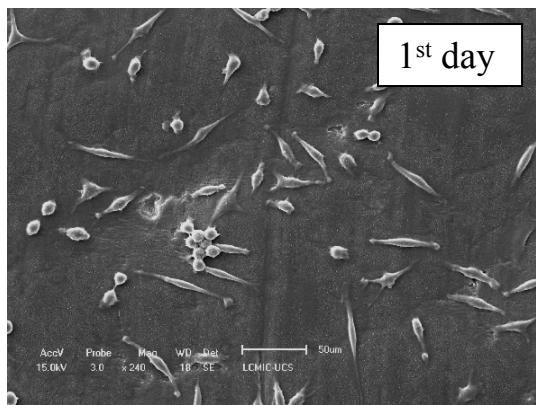


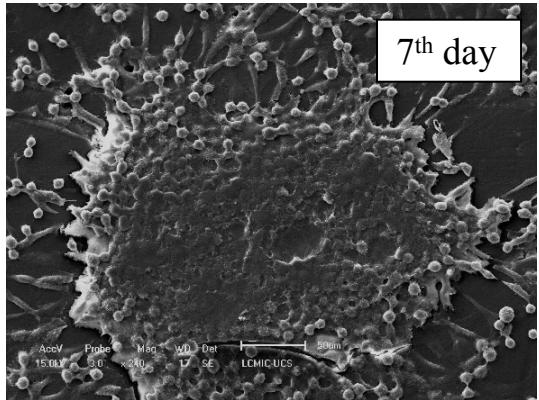


**Figure A2.** High resolution scanning electron microscopy images of the CPO samples after 1, 2 and 7 days of incubation.

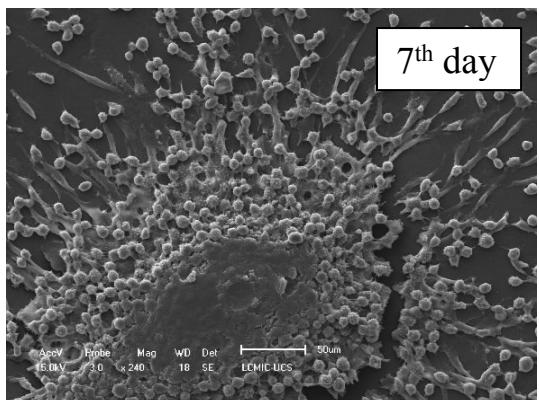
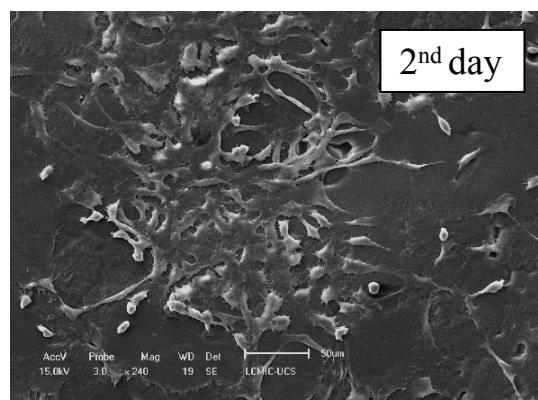
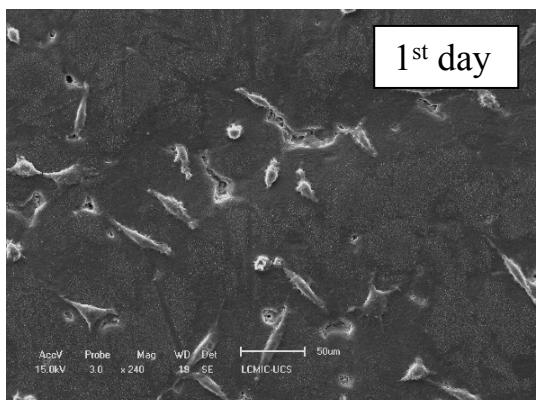


**Figure A3.** High resolution scanning electron microscopy images of the EtO samples after 1, 2 and 7 days of incubation.





**Figure A4.** High resolution scanning electron microscopy images of the HPP samples after 1, 2 and 7 days of incubation.



**Figure A5.** High resolution scanning electron microscopy images of the SA samples after 1, 2 and 7 days of incubation.