

Supplementary Materials for

Cyclodextrin-polypyrrole coatings of scaffolds for tissue engineering

Jan Lukášek ^{1,2}, Šárka Hauzerová ³, Kristýna Havlíčková ³, Kateřina Strnadová ³, Karel Mašek ⁴,
Martin Stuchlík ¹, Ivan Stibor ¹, Věra Jencová ⁵ and Michal Řezanka ^{1,*}

- ¹ Department of Nanomaterials in Natural Science, Institute for Nanomaterials, Advanced Technologies and Innovation, Technical University of Liberec, Studentská 1402/2, 461 17, Liberec, Czech Republic; jan.lukasek@tul.cz (J.L.); martin.stuchlik@tul.cz (M.S.); ivan.stibor@tul.cz (I.S.)
 - ² Institute of New Technologies and Applied Informatics, Faculty of Mechatronics, Informatics and Interdisciplinary Studies, Technical University of Liberec, Studentská 1402/2, 461 17, Liberec, Czech Republic
 - ³ Department of Nonwovens and Nanofibrous Materials, Faculty of Textile Engineering, Technical University of Liberec, Studentská 1402/2, 461 17, Liberec, Czech Republic; sarka.hauzerova@tul.cz (Š.H.); kristyna.havlickova@tul.cz (K.H.); katerina.strnadova@tul.cz (K.S.)
 - ⁴ Department of Surface and Plasma Science, Faculty of Mathematics and Physics, Charles University, V Holešovičkách 2, 180 00, Prague 8, Czech Republic; karel.masek@mff.cuni.cz (K.M.)
 - ⁵ Department of Chemistry, Faculty of Science, Humanities and Education, Technical University of Liberec, Studentská 1402/2, 461 17, Liberec, Czech Republic; vera.jencova@tul.cz (V.J.)
- * Correspondence: michal.rezanka@tul.cz (M.Ř.)

1. NMR spectra of 6-(pyrrol-3-yl)hexanoic acid

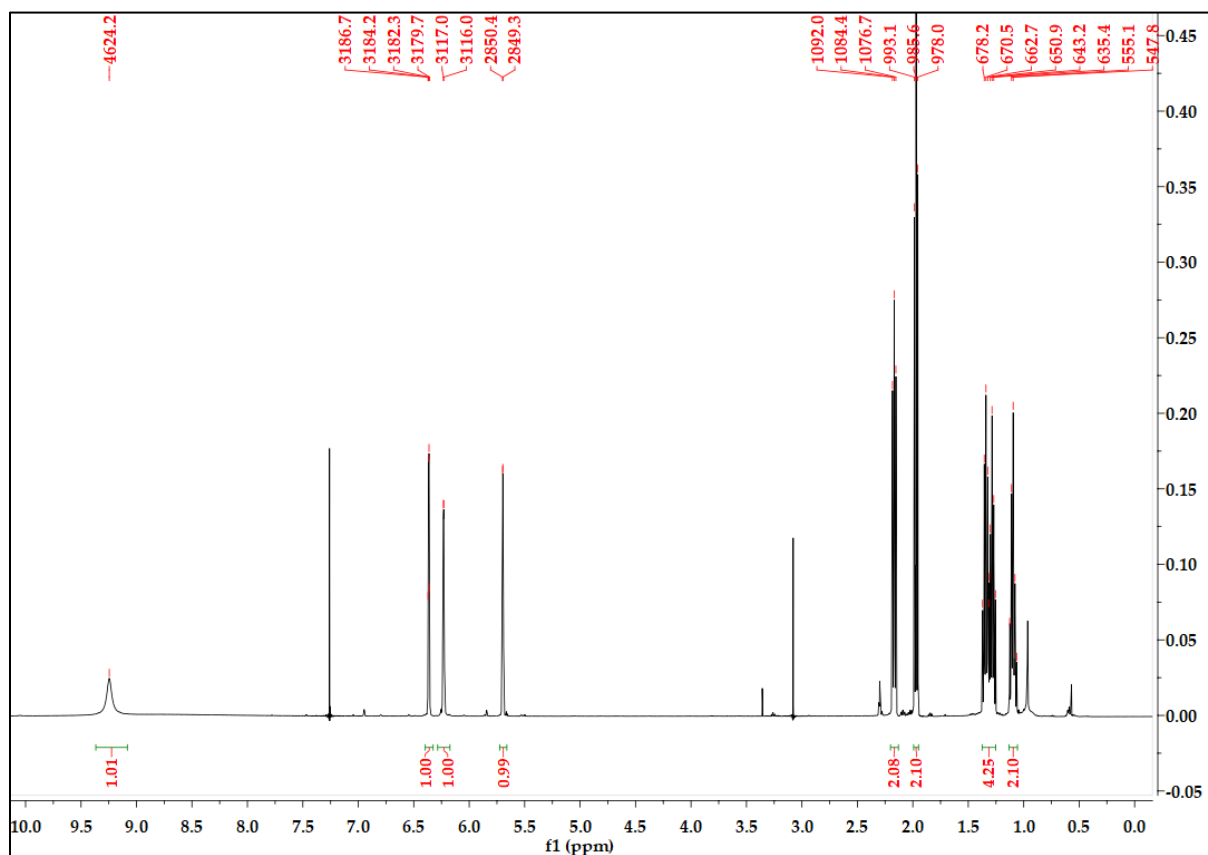


Figure S1. ¹H NMR spectrum (CDCl₃/MeOD, 298 K, 500 MHz).

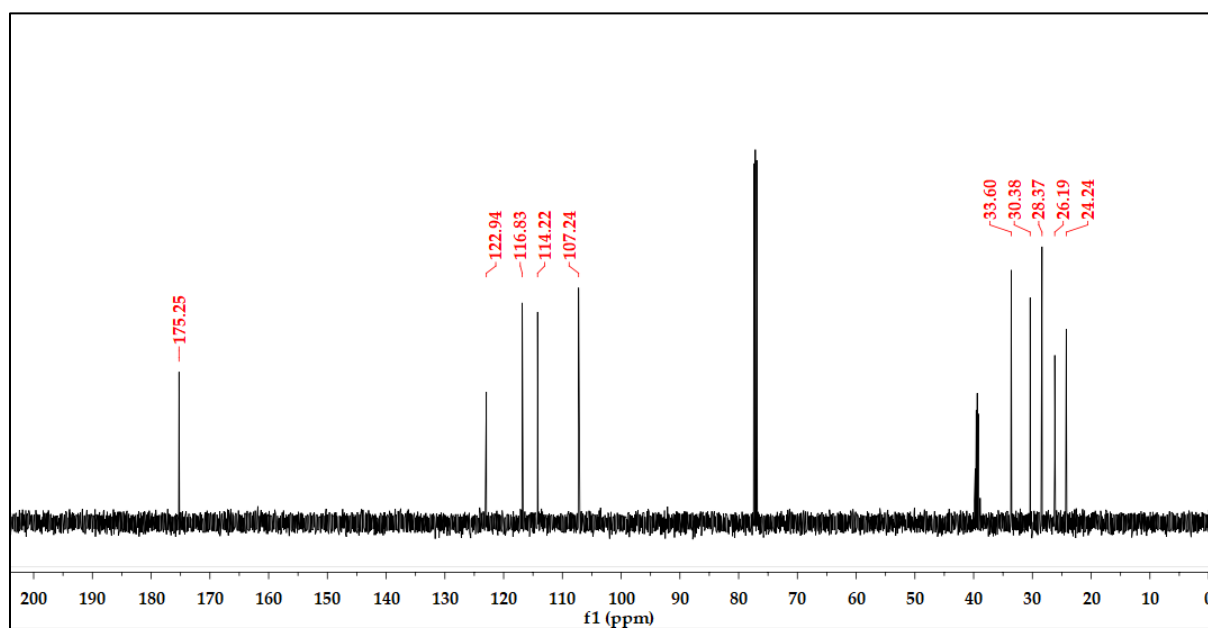


Figure S2. ¹³C NMR spectrum (CDCl₃/MeOD, 298 K, 126 MHz).

2. Specific surface area measurement (BET)

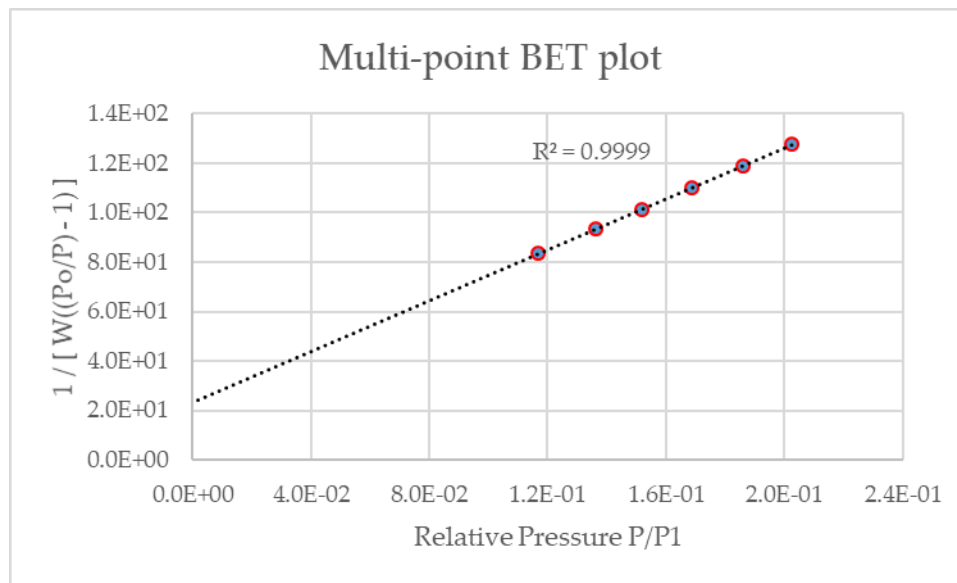


Figure S3. Multi-point BET plot.

3. Cell culturing

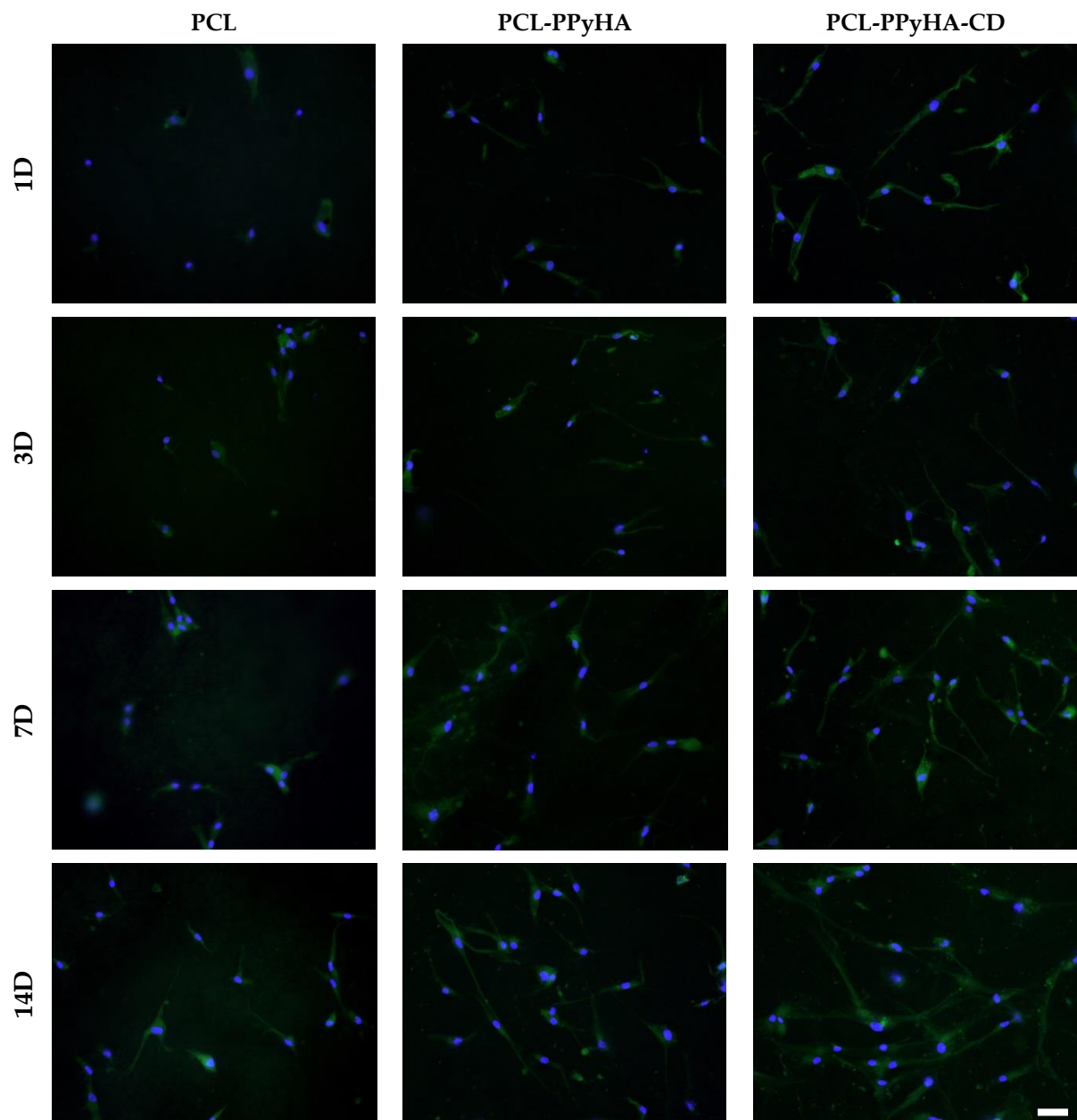


Figure S4. Fluorescent microscopy of cells seeded on PCL, PCL-PPyHA and PCL-PPyHA-CD scaffolds on days 1, 3, 7 and 14 after cell seeding. Staining: phalloidin-DAPI.

Scale bar: 50 μm .

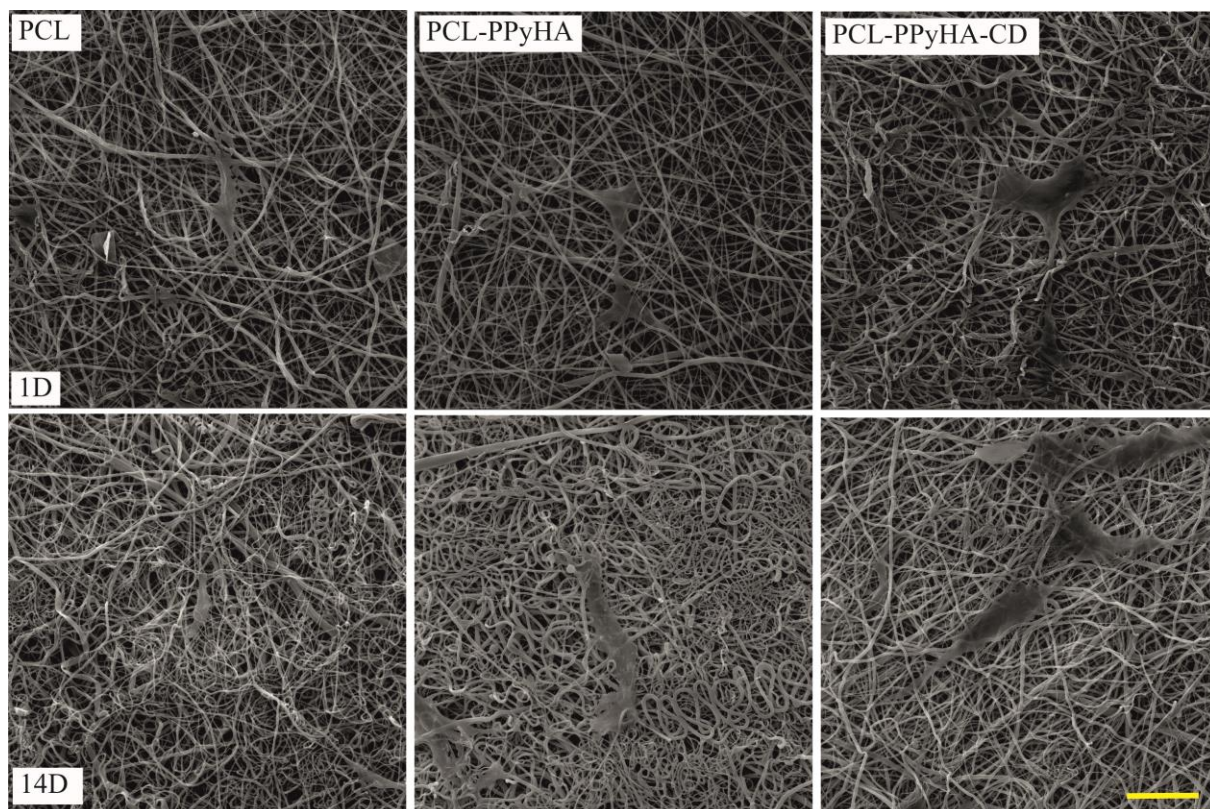


Figure S5. SEM images of the PCL, PCL-PPyHA and PCL-PPyHA-CD scaffolds on days 1 and 14 after cell seeding. Scale bar: 50 μm .