



**AL MAGNIFICO RETTORE  
DELL'UNIVERSITA' DEGLI STUDI DI MILANO**

**COD. ID: 5075**

Il sottoscritto chiede di essere ammesso a partecipare alla selezione pubblica, per titoli ed esami, per il conferimento di un assegno di ricerca presso il Dipartimento di \_\_\_\_\_ Scienze Biomediche, Chirurgiche e Odontoiatriche \_\_\_\_\_

Responsabile scientifico: \_\_\_\_\_ Prof. Giampietro Farronato \_\_\_\_\_

**[Lorenzo Bonetti]**

## **CURRICULUM VITAE**

### INFORMAZIONI PERSONALI

|                |         |
|----------------|---------|
| <b>Cognome</b> | Bonetti |
| <b>Nome</b>    | Lorenzo |

### OCCUPAZIONE ATTUALE

| <b>Incarico</b>              | <b>Struttura</b>  |
|------------------------------|---|
| Postdoctoral research fellow | Dipartimento Chimica, Materiali e Ingegneria Chimica "G. Natta", Politecnico di Milano (IT) |

### ISTRUZIONE E FORMAZIONE

| <b>Titolo</b>                       | <b>Corso di studi</b>    | <b>Università</b>     | <b>anno conseguimento titolo</b> |
|-------------------------------------|--------------------------|-----------------------|----------------------------------|
| Laurea Magistrale o equivalente     | Ingegneria Biomedica     | Politecnico di Milano | 04/2017                          |
| Specializzazione                    |                          |                       |                                  |
| Dottorato Di Ricerca                | Ingegneria dei Materiali | Politecnico di Milano | 07/2021                          |
| Master                              |                          |                       |                                  |
| Diploma Di Specializzazione Medica  |                          |                       |                                  |
| Diploma Di Specializzazione Europea |                          |                       |                                  |
| Altro                               |                          |                       |                                  |

### ISCRIZIONE AD ORDINI PROFESSIONALI

| <b>Data iscrizione</b> | <b>Ordine</b>                       | <b>Città</b> |
|------------------------|-------------------------------------|--------------|
| 02/2018                | Ingegneri della Provincia di Milano | Milano       |



## LINGUE STRANIERE CONOSCIUTE

| lingue  | livello di conoscenza   |
|---------|-------------------------|
| Inglese | C1 (ETS TOEIC, 945/990) |

## PREMI, RICONOSCIMENTI E BORSE DI STUDIO

| anno    | Descrizione premio   |
|---------|--|
| 09/2020 | Borsa di studio: Trieste Next Academy  |
| 04/2019 | Borsa di studio: COST Action CA15114 - Summer school on Antibacterial Coatings               |
| 09/2018 | Best poster award: European Society for Biomaterials (ESB), 9-13 Sept. 2018, Maastricht (NL) |

## ATTIVITÀ DI FORMAZIONE O DI RICERCA

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| <b>Graduate Research Fellow 05/2017 - 10/2017</b>   |
| Dipartimento Chimica, Materiali e Ingegneria Chimica "G. Natta", Politecnico di Milano (IT) |

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| <b>Visiting PhD Student 05/2019 - 08/2019</b>         |
| Dept. Mechanical Engineering - Ottawa University (CA) |

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| <b>Courses and schools</b>  |
| <ul style="list-style-type: none"><li>• Trieste Next, Festival della ricerca scientifica, 25-27 Sept 2020, Trieste (IT)</li><li>• CAMaR Biomaterials Training and Workshop: "Bio &amp; Nanomaterials for Clinical Translation", 17-20 Jun 2019, Ottawa University, Ottawa (CA)</li><li>• Training School on "Antimicrobial Coatings", 8-12 Apr 2019, Amsterdam UMC, Amsterdam (NL)</li><li>• Summer school "Nanocellulose: relationship between fundamentals and applications", 20-24 Aug 2018, Helsinki (FI)</li></ul> |

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| <b>Teaching Assistant Experience</b>  |
| <b>AY: 2021-2022</b><br>Title of the course: Trends in food industry lab A<br>Course of studies: Master of Science in Food Engineering (Politecnico di Milano)<br>Prof: Prof. Dr. L. De Nardo<br><br>Title of the course: Proprietà generali dei materiali<br>Course of studies: Bachelor of science in Fashion Design (Politecnico di Milano)<br>Prof: Prof. Dr. L. Altomare |



Title of the course: Tecnologie dei materiali per la moda  
Course of studies: Bachelor of science in Fashion Design (Politecnico di Milano)  
Prof: Prof. Dr. L. De Nardo  
AY: 2020-2021

Title of the course: Tecnologie dei materiali per la moda  
Course of studies: Bachelor of science in Fashion Design (Politecnico di Milano)  
Prof: Prof. Dr. L. De Nardo

Title of the course: Food packaging materials  
Course of studies: Master of Science in Food Engineering (Politecnico di Milano)  
Prof: Prof. Dr. L. De Nardo

Title of the course: Proprietà generali dei materiali  
Course of studies: Bachelor of science in Fashion Design (Politecnico di Milano)  
Prof: Prof. Dr. L. Altomare

Title of the course: Strutture bioartificiali e biomimetiche  
Course of studies: Master of Science in Biomedical Engineering (Politecnico di Milano)  
Prof: Prof. Dr. S. Farè

Title of the course: Bioingegneria chimica  
Course of studies: Bachelor of Science in Biomedical Engineering (Politecnico di Milano)  
Prof: Prof. Dr. S. Farè

Title of the course: Materiali e dispositivi biomedici  
Course of studies: Bachelor of Science in Industrial Design (Politecnico di Milano)  
Prof: Prof. Dr. M.C. Tanzi

**AY: 2019-2020**

Title of the course: Materiali per dispositivi protesici  
Course of studies: Bachelor of Science in Industrial Design (Politecnico di Milano)  
Prof: Prof. Dr. M.C. Tanzi

**AY: 2018-2019**

Title of the course: Biomateriali  
Course of studies: Master of Science in Biomedical Engineering (Politecnico di Milano)  
Prof: Prof. Dr. S. Farè

Title of the course: Bioingegneria chimica  
Course of studies: Bachelor of Science in Biomedical Engineering (Politecnico di Milano)  
Prof: Prof. Dr. S. Farè

Title of the course: Biomateriali per dispositivi protesici  
Course of studies: Bachelor of Science in Industrial Design (Politecnico di Milano)  
Prof: Prof. Dr. M.C. Tanzi

## Training Experience

- 3 B.Eng students in Biomedical Engineering
- 10 M.Eng students in Biomedical Engineering
- 3 M.Eng student in Materials Engineering and Nanotechnologies
- 1 M.S. student in Dental Medicine



## ATTIVITÀ PROGETTUALE

| Anno      | Progetto   |
|-----------|--|
| 2017-2021 | PRIN 'ACTION' 2017SZ5WZB_002, Recipient: Prof. Lina Altomare                   |
| 2014-2020 | PON FESR 2014-2020, Asse I - Azione I.1.B.1.2, Recipient: Prof. Luigi De Nardo |
| 2014-2020 | POR FESR 2014-2020 (ID 145207), Recipient: Prof. Luigi De Nardo                |

## CONGRESSI, CONVEGNI E SEMINARI

| Data            | Titolo                                  | Sede            |
|-----------------|---|-----------------|
| 5-9 Sept. 2021  | European Society for Biomaterials (ESB) | Virtual         |
| 11-14 Jul. 2021 | Italian Society for Biomaterials (SIB)  | Lecce (IT)      |
| 11-15 Dec. 2020 | World Biomaterials Congress (WBC)       | Virtual         |
| 1-6 Dec. 2019   | Materials Research Society (MRS)        | Boston (USA)    |
| 9-13 Sept. 2018 | European Society for Biomaterials (ESB) | Maastricht (NL) |
| 24-26 May 2017  | Italian Society for Biomaterials (SIB)  | Milan (IT)      |

## PUBBLICAZIONI

| Articoli su riviste  |
|--|
| Bonetti L., De Nardo L., Farè S. Chemically crosslinked methylcellulose substrates for cell sheet engineering, <i>Gels</i> 7.3 (2021): 141, DOI: 10.3390/gels7030141   |
| Lomboni D.J., Steeves A., Schock S. et al. Compounded topographical and physicochemical cueing by microengineered chitosan substrates on rat dorsal root ganglion neurons and human mesenchymal stem cells, <i>Soft Matter</i> , 17 (2021): 5284-5302, DOI: 10.1039/D0SM02170A |
| Bonetti L., Fiorati A., Serafini A. et al. Graphene nanoplatelets composite membranes for thermal comfort enhancement in performance textiles, <i>Journal of Applied Polymer Science</i> 138.2 (2021): 49645, DOI: 10.1002/app.49645   |
| Bonetti L., De Nardo L., Farè S. Thermo-responsive methylcellulose hydrogels: from design to applications as smart biomaterials, <i>Tissue Engineering Part B: Reviews</i> , In Press (2020), DOI: 10.1089/ten.TEB.2020.0202   |
| Bonetti L., De Nardo L., Variola F., Farè S. Evaluation of the subtle trade-off between physical stability and thermoresponsiveness in crosslinked methylcellulose hydrogels, <i>Soft Matter</i> 16 (2020): 5577-5587, DOI: 10.1039/D0SM00269K                                 |
| Bonetti L., De Nardo L., Variola F., Farè S. In-situ Raman spectroscopy: an effective technique for the quantification of LCST transition of methylcellulose hydrogels, <i>Materials Letters</i> 274 (2020): 128011, DOI: 10.1016/j.matlet.2020.128011                         |



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| Bonetti L., Bono N, Altomare L. et al. Electrophoretic processing of chitosan-based composite scaffolds with Nb doped bioactive glass for bone tissue regeneration, <i>Journal of Materials Science: Materials in Medicine</i> 31 (2020): 43, DOI: 10.1007/s10856-020-06378-6 |
| Ghalayani Esfahani A., Altomare L., Bonetti L. et al. Micro-Structured Patches for Dermal Regeneration Obtained via Electrophoretic Replica Deposition, <i>Applied Sciences</i> 10.14 (2020): 5010, DOI: 10.3390/app10145010.   |
| Altomare L., Bonetti L., Campiglio C.E., et al. Biopolymer-based strategies in the design of smart medical devices and artificial organs, <i>The International journal of artificial organs</i> 41.6 (2018): 337-359, DOI: 10.1177/0391398818765323.                          |
| Cochis A., Bonetti L., Sorrentino R., et al. 3D Printing of Thermo-Responsive Methylcellulose Hydrogels for Cell-Sheet Engineering, <i>Materials</i> 11.4 (2018): 579, DOI: 10.3390/ma11040579.   |
| Contessi Negrini N., Bonetti L., Contili L, Farè S. 3D printing of methylcellulose-based hydrogels, <i>Bioprinting</i> 10, e00024 (2018), DOI: 10.1016/j.bprint.2018.e00024.  |

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| <b>Atti di convegni (Oral Presentations)</b>  |
| Bonetti L, Boccali A., Altomare L., Methylcellulose-based composites for bone tissue engineering, Italian Society for Biomaterials (SIB), 11-14 Jul 2021, Lecce (IT).   |
| Bonetti L., De Nardo L., Variola F., Farè S., Citric acid crosslinking of methylcellulose hydrogels, European Society of Biomechanics (ESBiomech), 11-14 Jul 2021, Virtual.   |
| Ribezzi D., Barbaglio F., Pinos R., et al., Design of a novel bioink suitable for 3D printing of lymphoid cells, European Society of Biomechanics (ESBiomech), 11-14 Jul 2021, Virtual.   |
| Bonetti L., Altomare L., Bono N., et al. Composite scaffolds with Nb-doped bioactive glasses for bone tissue regeneration, World Biomaterials Congress (WBC), 11-15 Dec 2020, Virtual   |
| Bonetti L., De Nardo L, Variola F., Farè S. Novel hydrophilic-hydrophobic thermo-responsive platforms from citric acid crosslinked methylcellulose hydrogels, Materials Research Society (MRS), 1-6 Dec 2019, Boston (US)   |
| Bonetti L., Fiorati A., Serafini A., et al. Graphene nanoplatelets-based membranes for thermal comfort enhancement in performance textiles, Materials Research Society (MRS), 1-6 Dec 2019, Boston (US).  |
| Bonetti L., Cochis A., Sorrentino R., et al. 3D printing of methylcellulose thermo-responsive hydrogels for regenerative medicine, Congress of Italian Society for Biomaterials (SIB), 24-26 May 2017, Milan (IT)   |
| Ghalayani Esfahani A., Soleimanzade M., Campiglio C.E. et al. Electrophoretic deposition of chitosan/Bioglass composite scaffolds with oriented micropatterns: fabrication process and in vitro biological properties, Congress of Italian Society for Biomaterials (SIB), 24-26 May 2017, Milan (IT) |

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| <b>Atti di convegni (Poster Presentations)</b>   |
| Bonetti L., De Nardo L., Farè S., Citric acid crosslinked methylcellulose hydrogels for cell sheet engineering, European Society for Biomaterials (ESB), 5-9 Sept 2021, Virtual.   |
| Bonetti L., De Nardo L., Farè S., Chemically crosslinked methylcellulose substrates for cell sheet engineering, Italian Society for Biomaterials (SIB), 11-14 Jul 2021, Lecce (IT).  |
| Bonetti L., De Nardo L., Variola F., Farè S. Citric acid crosslinked methylcellulose-based hydrogels, World Biomaterials Congress (WBC), 11-15 Dec 2020, Virtual   |
| Altomare L., Viganò Rivera F., Bonetti L., et al., Bilayer chitosan-based patches for clobetasol transmucosal drug delivery in the oral cavity, World Biomaterials Congress (WBC), 11-15 Dec 2020, Virtual                             |
| Bonetti L., Fiorati A., Serafini A., et al., Graphene nanoplatelets-based membranes for thermal comfort enhancement in performance textiles, Materials Research Society (MRS), 1-6 Dec 2019, Boston (US)                               |
| Bonetti L., Cochis A., Sorrentino R., et al., 3D printing of methylcellulose-based hydrogels as substrates for cell sheet engineering, 29th Conference of the European Society for Biomaterials (ESB), 9-13 Sept 2018, Maastricht (NL) |



## ALTRE INFORMAZIONI

### Referee for International Journals

- Bioactive Materials (Elsevier Sci. Ltd), ISSN: 2452-199X, IF: 14.593
- Carbohydrate Polymers (Elsevier Sci. Ltd), ISSN: 0144-8617, IF: 9.381
- Tissue Engineering Part B: Reviews (Mary Ann Liebert Inc.), ISSN: 1937-3368, IF: 6.389
- Journal of Applied Polymer Science (John Wiley and Sons Inc.), ISSN: 1097-4628, IF: 3.125

Le dichiarazioni rese nel presente curriculum sono da ritenersi rilasciate ai sensi degli artt. 46 e 47 del DPR n. 445/2000.

Il presente curriculum, non contiene dati sensibili e dati giudiziari di cui all'art. 4, comma 1, lettere d) ed e) del D.Lgs. 30.6.2003 n. 196.

RICORDIAMO che i curricula **SARANNO RESI PUBBLICI sul sito di Ateneo** e pertanto si prega di non inserire dati sensibili e personali. Il presente modello è già precostruito per soddisfare la necessità di pubblicazione senza dati sensibili.

Si prega pertanto di **NON FIRMARE** il presente modello.

Luogo e data: Milano, 14/10/2021