

ÖZGEÇMİŞ VE ESERLER LİSTESİ

(YÖK FORMATINDA HAZIRLANMIŞTIR)

ÖZGEÇMİŞ

Adı Soyadı: Muammer Çatak

Doğum Tarihi: 1981

| Derece | Bölüm/Program | Üniversite | Yıl |
|-----------|--|---|------|
| Lisans | Mühendislik Fakültesi, Elektrik – Elektronik Mühendisliği Bölümü | Orta Doğu Teknik Üniversitesi | 2004 |
| Y. Lisans | Mühendislik Fakültesi, Elektrik Mühendisliği Bölümü | Blekinge Institute of Technology , İsveç | 2006 |
| Doktora | Mühendislik Fakültesi, Proses ve Kimya Mühendisliği Bölümü | University College Cork, İrlanda | 2010 |

Yüksek Lisans Tez Başlığı ve Danışmanı:

Variance-Reduction Techniques in Simulations of Telecommunication Networks

Danışman: Dr. M. Fiedler

Doktora Tezi Başlığı ve Danışmanı:

Development and validation of Markov chain modelling of the re-circulatory fluidised bed granulation process

Danışman: Dr. Kevin Cronin

Görevler:

| Görev Unvanı | Görev Yeri | Yıl |
|-------------------|--|-----------------------------|
| Yard. Doç. Dr. | İzmir Üniversitesi, Elektronik ve Haberleşme Bölümü | Eylül 2010 - |
| Ar. Gör. | University College Cork, Proses ve Kimya Mühendisliği Bölümü | Ocak 2007 - Haziran 2010 |

Projelerde Yaptığı Görevler:

- 2008 MEngSc Research Project: Analysis of the Residence Time Distribution in a Re-circulatory Fluidised Bed Processing Unit. **Supervisor**
- 2007 MEngSc Research Project: Motion of Particles on a Vibratory Conveyor as a Random Process. **Supervisor**

ESERLER

A. Uluslararası hakemli dergilerde yayımlanan makaleler :

- **Catak, M.**, Bas, N., Medina, D., Cronin, K., Byrne, E.P., Fitzpatrick, J.J., (*In press*), Markov chain modelling of fluidised bed granulation. Chemical Engineering Journal.
- **Catak, M.**, Bas, N., Cronin, K., O'Brien S., Byrne, E.P., (*In press*), Mathematical Modelling of a solid particle motion in a re-circulatory fluidised bed unit, The Canadian Journal of Chemical Engineering.
- **Catak, M.**, Bas, N., Cronin, K., Fitzpatrick, J.J., Byrne, E.P. , (*In press*), Discrete solution of breakage equation using Markov chains. Industrial Engineering Chemistry and Research.
- Cronin, K., **Catak, M***, Dempsey, S., Ollagnier, R. Stochastic Modelling of Particle Motion along a Sliding Conveyor, AIChE Journal, 56, 114-124 (2010).
- Cronin, K., **Catak, M.**, Medina, D., O'Brien, S., (*In press*), Modelling of particle motion in a recirculatory fluidised bed. Chemical Engineering Journal.

• Bas, N., **Catak, M.**, Zumaeta, N., Fitzpatrick, J.J., Cronin, K., Byrne, E.P. Population balance modelling of protein precipitates exhibiting turbulent flow through a circular pipe, *Chemical Engineering Science*, 64, 4051-4059 (2009).

• Medina, D., Byrne, E.P., Fitzpatrick, J.J., **Catak, M.**, Cronin, K., (*In press*), Relationship between mechanical properties and shape descriptors of wet granules. *Chemical Engineering Journal*.

• Bas, N., Pathare, P.B., **Catak, M.**, Fitzpatrick, J.J., Cronin, K., Byrne, E.P. , (*In press*), Mathematical modelling of granola breakage during pipe pneumatic conveying. *Powder Technology*.

B. Uluslararası bilimsel toplantılarda sunulan ve bildiri kitabında (Proceedings) basılan bildiriler :

• **Catak, M.**, Cronin, K, Markov chain modelling of particle motion in an internal fluidised bed. World Congress on Particle Technology 6, 26-29 April 2010, Nuremberg, Germany.

• Cronin, K, **Catak, M.**, Hanley, K., Medina, D., Byrne, E.P., Fitzpatrick, J.J. Probabilistic modelling of particle motion in a circulatory fluidised bed including inter-particle collisions. World Congress on Particle Technology 6, 26-29 April 2010, Nuremberg, Germany.

• **Catak, M.**, Bas, N., Medina, D., Pathare, P.B., Byrne, E.P., Fitzpatrick, J.J., Cronin, K., Monte Carlo simulation of fluidised bed granulation. 8th World conference of Chemical Engineering 23-27 August 2009, Montreal, Quebec, Canada.

• **Catak, M.**, Bas, N., Medina, D., Byrne, E.P., Fitzpatrick, J.J., Cronin, K., Markov chain modelling for fluidised bed granulation. 9th International Symposium on Agglomeration and 4th International Granulation Workshop, 22 - 26 June 2009, Sheffield, UK.

• Cronin, K., **Catak, M.**, Medina, D., O'Brien, S., Modelling of particle motion in a recirculatory fluidised bed; prediction of process residence times. 9th International Symposium on Agglomeration and 4th International Granulation Workshop 22 - 26 June 2009, Sheffield, UK.

• Pearson L., **Catak M.**, O'Brien S., Abodayeh K., Cronin K., Modelling of particle motion in recirculatory fluidised bed. Presented in the 25th International Manufacturing Conference 3rd - 5th September 2008 Dublin, Ireland.

• Medina, D., Byrne, E.P., Fitzpatrick, J.J., **Catak, M.**, Cronin, K., Relationship between mechanical properties and shape descriptors of wet granules. 9th International Symposium on Agglomeration and 4th International Granulation Workshop 22 - 26 June 2009, Sheffield, UK.

• Irwin, V.P., Cronin, K., **Catak, M.**, Experimental Analysis of the Effect of Binder Types on Size Distribution of Granules in the Fluidised Bed Granulation Process. The Excipient-Fest Europe Poster Presentation, 17-18 June 2008, Cork, Ireland.