Diffusion phenomena in biological systems

PhD Course

Titles:

- Diffusion and convection
- Diffusion across cell membranes
- Active and passive transport
- Mass flow in blood system
- Absorption of nutrients
- Rate of biological reactions
- Role of enzymes
- Shrinking core model
- Progressive conversion model
- Mass transfer between phases
- Practical examples

References:

1. O. Levenspiel, "Chemical Reaction Engineering", 3rd Edition, Wiley, (1998), ISBN 978-0471254249.
2. S.K. Sadrnezhaad, "Kinetic Processes in Materials Engineering and Metallurgy", 3rd Edition, Amir Kabir Publishing Corporation, Tehran, Iran, (2008), ISBN 1-72008-0.
3. Julian Szekely, James W. Evans and Hong Yong Sohn "Gas-Solid Reactions", Academic Press, New York, (1976), ISBN ISBN 0-12-680850-3.

For more information please see Persian Version.