**OGUZ OKAY**

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**PERSONAL**

Born: September 14, 1955, Istanbul, Turkey.

Maritial Status: Married with two children

**EDUCATION**

Ph.D. in Macromolecular Chemistry, Vienna Technical University, Austria, June 1981.

B.S. in Chemical Engineering, Istanbul University, June 1977.

**PROFESSIONAL EXPERIENCE**

Professor. Physical Chemistry. Department of Chemistry, Istanbul Technical University, Turkey, 1998 to present

Visiting Professor. Helmholtz Zentrum Berlin, Institute Soft and Functional Materials, Wannsee, Berlin, Germany, 2015 (12 months)

Visiting Professor. Institute of Physical Chemisty, Clausthal University of Technology, Clausthal-Zellerfeld, Germany, 2006 (2 months), 2009 (2 months)

Visiting Professor. Institute of Physical Chemisty, Dresden Technical University, Dresden, Germany, 2007 (4 months).

Visiting Professor. Department of Chemical and Biological Engineering, University of Colorado, Boulder, 2004 (4 months).

Visiting Professor, University of Stuttgart, Institute for Textil and Fiber Chemistry, Stuttgart, Germany, 2002 (3 months)

Founding Coordinator, Interdisciplinary Polymer Science and Technology Graduate Program, Istanbul Technical University, 1999-2000; 2019-2022.

Professor. Head of Physical Chemistry Section. Department of Chemistry, Kocaeli University, Turkey, 1995 to 1998

Associate Professor. Department of Chemistry, Eastern Mediterranean University, Gazimagusa, North Cyprus, 1990 to 1992

Scientific Advisor. Department of Chemistry, TÜBİTAK Marmara Research Center, Gebze, Kocaeli, Turkey, 1995 to 2001.

Senior Researcher. Department of Chemistry, TÜBİTAK Marmara Research Center, Gebze, Kocaeli, Turkey, 1992 to 1995.

Visiting Researcher. Institute of Technical Chemistry, University of Stuttgart, Germany, 1988 to 1999 (18 months)

Research Scientist. Departments of Chemistry and Chemical Engineering, TÜBİTAK Marmara Research Center, Gebze, Kocaeli, Turkey, 1982 to 1990.

Research Associate. Macromolecular Chemistry, Vienna Technical University, Austria, June – December 1981.

**HONORS AND AWARDS**

2014 Georg-Forster Research Award, Alexander von Humboldt Foundation, Germany

2007 Science Award, Istanbul Technical University Foundation (with D. Ceylan)

2006 Elected to the *Turkish Academy of Sciences* (TÜBA)

2006 Honorary Member, Turkish Chemical Society

2005 TUBITAK Science Award (**The highest science award in Turkey**)

1996 Science Award, Kocaeli University

1995 Science Award, TUBITAK Marmara Research Center

1994 SEDAT SIMAVI Natural Sciences Award

1990 TUBITAK Science Encouragement Award

1988 Alexander von Humboldt Research Fellowship

1977 TUBITAK-NATO Doctoral Fellowship

**EDITORIAL DUTIES IN INTERNATIONAL SCIENTIFIC JOURNALS**

Advances in Polymer Science, Springer, Editorial Board Member (2013- )

Reactive and Functional Polymers, Elsevier, Editorial Board Member (2019- )

Turkish Journal of Chemistry, TUBITAK, Editorial Board Member (~2000- )

Macromolecular Materials and Engineering, Wiley, Editorial Board Member (~2024- )

**PUBLICATIONS & CITATIONS:**

Publications: ~200 papers, 2 books, 3 book chapters, 5 patents

Citations: ~15000

H-index: 68

**PUBLICATIONS**

217. Silk Fibroin-Based Multiple-Shape-Memory Organohydrogels.

C. B. Oral, E. Su, O. Okay, ACS Appl. Mater. Interfaces16, 56146–56158 (2024)

216. Self-healing and shape-memory in mechanically robust hydrogels.

O. Okay, AsiaChem. 133 (2024)

215. 4D Printing of Self-Healing and Shape-Memory Hydrogels Sensitive to Body Temperature.

G. Aydin, T. Abdullah, O. Okay, (2024)

214. Design of electrospun hydrophobically modified polyacrylic acid hydrogel nanofibers and their application for removal of emerging contaminants.

G. Ilyasoglu, T. Abdullah, O. Okay, I. Koyuncu, (2024)

213. Melt-Processable and Electrospinnable Shape-Memory Hydrogels.

T. Abdullah, C. Altınkok, O. Okay, Macromol. Mater. Eng. 2400166 (2024)

212. Mechanically Robust Shape-Memory Organohydrogels Based on Silk Fibroin with Organogel Microinclusions of Various Sizes.

Y. Bas, O.Okay, Macromol. Mater. Eng. 2300129 (2023)

211. Cryogelation reactions and cryogels: Principles and challenges

O. Okay, TJC (2023)

210. Effects of Cryogenic Condition and Chemistry on the Properties of Synthetic and Biopolymer Cryogels.

G. Doser, E. Su, O.Okay, React. Funct. Polym. 190, 105635 (2023)

209. Silk Fibroin Based Shape-Memory Organohydrogels with Semicrystalline Microinclusions.

C. B. Oral, B. Yetiskin, C. Cil, F. N. Kok, O. Okay, ACS Appl. Bio Mater. 6, 1594-1603 (2023)

208. 4D Printing of Body Temperature-Responsive Hydrogels Based on Polyacrylic Acid with Shape-Memory and Self-Healing Abilities.

T. Abdullah, O. Okay. ACS Appl. Bio Mater. 6, 703-711 (2023)

207. Mechanically Strong Superabsorbent Terpolymer Hydrogels Based on AMPS via Hydrogen-Bonding Interactions.

B. Sekizkardes, E. Su, O. Okay, ACS Appl. Polym. Mater. 5, 2043–2050 (2023).

206. Roadmap to Design Mechanically Robust Copolymer Hydrogels Naturally Cross-Linked by Hydrogen Bonds.

C. Erkoc, E. Yildirim, M. Yurtsever, O. Okay, Macromolecules 55, 10576–10589 (2022)

205. Sterilization studies of hydrogel nanocomposites designed for possible biomedical applications before in vivo research.

G. B. Sekitmen, E. Su, S. D. Gür, S. Ide, O. Okay, React. Funct. Polym. 180, 105393 (2022)

204. Photocurable Methacrylated Silk Fibroin/Hyaluronic Acid Dual Macrocrosslinker System Generating Extracellular Matrix-Inspired Tough and Stretchable Hydrogels.

B. Yetiskin, B. Tavsanli, O. Okay, Macromol. Mater. Eng. 2200334 (2022)

203. A silk fibroin cryogel building adaptive organohydrogels with switching mechanics and viscoelasticity.

B. Yetiskin, O. Okay, ACS Appl. Polym. Interfaces 4, 7, 5234–5245 (2022)

202. Polycyclic aromatic hydrocarbon accumulation performances of monophasic butyl rubber passive samplers.

O. E. Tureyen, S. D. Yakan, A. Yilmaz, B. Yetiskin, O. Okay, O. S. Okay, Environ. Process. 9, 34 (2022)

201. Butyl rubber as a macro-cross-linker in the preparation of a shape-memory and self-healing polymer.

B.Tavsanli, C. Bilici, P. Sungur, S. Ide, O. Okay, J. Rheo. 66, 1367-1378 (2022)

200. Surface modification of graphene oxide for preparing self-healing nanocomposite hydrogels.

E. B. Ceper, E. Su, O. Okay, O. Güney, Polym. Adv. Technol. 33, 2276-2288 (2022).

199. Butyl rubber-based interpenetrating polymer networks with side chain crystallinity: Self-healing and shape-memory polymers with tunable thermal and mechanical properties.

E. Su, G. Bayazit, S. Ide, O. Okay, Eur. Polym. J. l68, 111098 (2022)

198. Shape-memory semicrystalline interconnected IPNs based on various rubbers.

O. Akca, O. Okay Macromol. Mater. Eng. 307, 2100776 (2022)

197. Bisphosphonate-functionalized poly(amido amine) crosslinked 2-hydroxyethyl methacrylate hydrogel as tissue engineering scaffold .

M. N. Guven, B. Balaban,, G. Demirci, H. Y. Acar, O. Okay, D. Avci, Eur. Polym. J. 159, 110732 (2021).

196. “Reentrant Conformation Transition in Hydrogels”

O. Okay, Gels 7, 98 (2021).

195. “Solvent-free UV polymerization of n-octadecyl acrylate in butyl rubber: A simple way to produce tough and smart polymeric materials at ambient temperature”

E. Su, C. Bilici, G. Bayazit, S. Ide, O. Okay, ACS Appl. Mater. Interfaces 13, 21786–21799 (2021).

194. “Behaviors of quenched polyampholytes in solution and gel state”

S. E. Kudaibergenov, O. Okay, Polym Adv Technol. 32, 2639–2654 (2021)

193. “Performance of butyl rubber-based macroporous sorbents as passive samplers”

O. E. Tureyen, A. Yilmaz, S. D. Yakan, B. Yetiskin, O. Okay, O. S. Okay, Environ. Sci. Pol. Res. 28, 3766–3773 (2021)

192. “How to design both mechanically strong and self-healable hydrogels?”

O. Okay, Adv. Polym. Sci. 285, 21-62 (2020)

191. “Self-healing and shape-memory hydrogels”

O. Okay, HJBC 48, 507-525 (2020)

190. “Stretchable silk fibroin hydrogels”

C. B. Oral, B. Yetiskin, O. Okay, Int. J. Bio. Macromol. 161, 1371-1380 (2020)

189. “Alendronate-functionalized poly(amido amine) cryogels of high-toughness for biomedical applications”

M. N. Guven, G. Demirci, S. Altuncu, U. Gulyuz, O. Okay, H.Y. Acar, D. Avci, Polymer 190, 122248, 1-11 (2020)

188. “Highly stretchable and thermally healable polyampholyte hydrogels via hydrophobic modification”

G. Toleutay, E. Su, S. Kudaibergenov, O. Okay, Colloid Polym. Sci. 298, 273-284 (2020)

187. Preparation of dextran cryogels for separation processes of binary dye and pesticide mixtures from aqueous solutions. B. Ari, B. Yetiskin, O. Okay, N. Sahiner. Polym. Eng. Sci. 60, 1890-1901 (2020)

186. “Macroporous hyaluronic acid cryogels of high mechanical strength and flow-dependent viscoelasticity”

B. Tavsanli, O. Okay, Carbohyd. Polym. 229, 115458, 1-10 (2020)

185. “Hydrophobically modified nanocomposite hydrogels with self-healing ability”

O. Akca, B. Yetiskin, O. Okay, J. Appl. Polym. Sci 137, 48853, 1 - 8 (2020)

184. “Single-, double-, and triple-network macroporous rubbers as a passive sampler”

B. Yetiskin, O. E. Tureyen, A. Yilmaz, S. D. Yakan, O. S. Okay, O. Okay, ACS Appl. Mater. Interfaces 11, 28317−28326 (2019)

183. “A self-healing and highly stretchable polyelectrolyte hydrogel via cooperative hydrogen-bonding as a superabsorbent polymer”

E. Su, M. Yurtsever, O. Okay, Macromolecules 52, 3257-3267 (2019)

182. “One-step injectable and bioreducible poly(β-amino ester) hydrogels as controlled drug delivery platform”

H. B. Bingol, M. S. Altuncu, F. D. Demir, A. Ak, U. Gulyuz, H. Y. Acar, O. Okay, D. Avci, ACS Appl. Polym. Mater. 1, 1724−1734 (2019)

181. “Cryogenic formation-structure-property relationships of poly(2-acrylamido-2-methyl-1-propanesulfonic acid) cryogels”

E. Su, O. Okay, Polymer 178, 121603, 1-9 (2019)

180. “Cryogel composites based on hyaluronic acid and halloysite nanotubes as scaffold for tissue engineering”

S. S. Suner, S. Demirci, B. Yetiskin, R. Fakhrullin, E. Naumenko, O. Okay, R. S. Ayyala, N. Sahiner, Int. J. Bio. Macromol. 130, 627–635 (2019)

179. “Semicrystalline physical hydrogels with shape-memory and self-healing properties”

O. Okay, J. Mater. Chem. B. 7, 1581-1596 (2019)

178. “Mechanically robust and stretchable silk/hyaluronic acid hydrogels”

B. Tavsanli, O. Okay, Carbohyd. Polym. 208, 413-420 (2019)

177. “Structure-property relationships of novel phosphonate-functionalized networks and gels of poly (-amino esters)”

S. Altuncu, F. D. Duman, U. Gulyuz, H. Y. Acar, O. Okay, D. Avci, Eur. Polym. J. 113, 155-164 (2019)

176. “Highly-stretchable and rapid self-recoverable cryogels based on butyl rubber as reusable sorbents”

S. Muslumova, B. Yetiskin, O. Okay, Gels 5, 1 (2019)

175. “Semi-crystalline, three-segmented hybrid gels with multiple shape memory effect”

A. Argun, U. Gulyuz, O. Okay, Macromol. Symp. 385, 1800164 (2019)

174. “High-strength and self-recoverable silk fibroin cryogels with anisotropic swelling and mechanical properties”

B. Yetiskin, O. Okay, Int. J. Bio. Macromol. 122, 1279-1289 (2019)

173. “Monitoring the instant creation of a new fluorescent signal for evaluation of DNA conformation based on intercalation complex”

A. T. Uzumcu, O. Guney, O. Okay, J. Fluoresc. 28, 1325-1332 (2018)

172. “Bisphosphonic acid functionalized crosslinkers to tailor hydrogel properties for biomedical applications”

M.N. Guven, M.S. Altuncu, T. Bal, D. Oran, U. Gulyuz, S. Kizilel, O. Okay, D. Avci, ACS Omega 3, 8638–8647 (2018)

171. “Toughness improvement and anisotropy in semicrystalline physical hydrogels”

C. Bilici, D. Karaarslan, S. Ide, O. Okay, Polymer 151, 208–217 (2018)

170. “Interfacing soft and hard materials with triple-shape-memory and self-healing functions”

A. Argun, U. Gulyuz, O. Okay, Macromolecules 51, 2437-2446 (2018)

169. “Highly stretchable DNA/clay hydrogels with self-healing ability”

A. T. Uzumcu, O. Guney, O. Okay, ACS Appl. Mater. Interfaces 10, 8296-8306 (2018)

168. “Hybrid cross-linked poly(2-acrylamido-2-methyl-1-propanesulfonic acid) hydrogels with tunable viscoelastic, mechanical and self-healing properties”

E. Su, O. Okay, React. Funct. Polym. 123, 70-79 (2018)

167. “Cryogelation within cryogels: Silk fibroin scaffolds with single-, double- and triple-network structures”

B. Yetiskin, C. Akinci, O. Okay, Polymer 128, 47-56 (2017)

166. “Mechanically strong hyaluronic acid hydrogels with an interpenetrating network structure”

B. Tavsanli, O. Okay, Eur. Polym. J. 94, 185-195 (2017)

165. “Yielding behavior of tough semicrystalline hydrogels”

C. Bilici, S. Ide, O. Okay, Macromolecules 50, 3647-3654 (2017)

164. “High-strength silk fibroin scaffolds with anisotropic mechanical properties”

B. Yetiskin, O. Okay, Polymer 112, 61-70 (2017)

163. “Polyampholyte hydrogels formed via electrostatic and hydrophobic interactions”

E. Su, O. Okay, Eur. Polym. J. 88, 191-204 (2017)

162. “Reversibility of strain stiffening in silk fibroin gels”

Z. Oztoprak, O. Okay, Int. J. Bio. Macromol. 95, 24-31 (2017)

161. “Nanocomposite DNA hydrogels with temperature sensitivity”

A. T. Uzumcu, O. Guney, O. Okay, Polymer 100, 169-178 (2016)

160. “Preparation and fracture process of high strength hyaluronic acid hydrogels cross-linked by ethylene glycol diglycidyl ether”

B. Tavsanli, O. Okay, React. Funct. Polym. 109, 42-51 (2016)

159. “Melt-processable shape-memory hydrogels with self-healing ability of high mechanical strength”

C. Bilici, V. Can, U. Nöchel, M. Behl, A. Lendlein, O. Okay, Macromolecules 49, 7442-74449 (2016)

158. “High-strength semi-crystalline hydrogels with self-healing and shape memory functions”

B. Kurt, U. Gulyuz, D. D. Demir, O. Okay, Eur. Polym. J. 81, 12-23 (2016)

157. “Nanostructural Evolution and Self-Healing Mechanism of Micellar Hydrogels”

V. Can, Z. Kochovski, V. Reiter, N. Severin, M. Siebenbürger, B. Kent, J. Just, J. P. Rabe, M. Ballauff, O. Okay, Macromolecules 49, 2281-2287 (2016)

156. “Self-Healing Poly(acrylic acid) Hydrogels: Effect of Surfactant”

U. Gulyuz, O. Okay, Macromol. Symp. 358, 232–238 (2015)

155. “Mechanically strong triple network hydrogels based on hyaluronan and poly(N,N-dimethylacrylamide)”

B. Tavsanli, V. Can, O. Okay, Soft Matter 11, 8517-8524 (2015)

154. “Self-healing poly(N-isopropylacrylamide) hydrogels”

U. Gulyuz, O. Okay, Eur. Polym. J. 72, 12-22 (2015)

153. “Self-healing hydrogels formed via hydrophobic interactions”

O. Okay, Adv. Polym. Sci. 268, 101-142 (2015)

152. “Preparation and physical properties of hyaluronic acid-based cryogels”

A. Strom, A. Larsson, O. Okay, J. Appl. Polym. Sci. 132, 42194 (2015)

151. “Self-healing poly(acrylic acid) hydrogels with shape memory behavior of high mechanical strength”

U. Gulyuz, O. Okay, Macromolecules 47, 6889-6899 (2014)

150. “Nonionic double and triple network hydrogels of high mechanical strength”

A. Argun, V. Can, U. Altun, O. Okay, Macromolecules 47, 6430-6440 (2014)

149. “Synthesis and structure–property relationships of cryogels”

O. Okay, V. I. Lozinsky, Adv. Polym. Sci. 263, 103-157 (2014)

148. “Basic principles of cryotropic gelation”

V. I. Lozinsky, O. Okay, Adv. Polym. Sci. 263, 49-101 (2014)

147. “Highly stretchable self-healing poly(N,N-dimethylacrylamide) hydrogels”

M. P. Algi, O. Okay, Eur. Polym. J. 59, 113-121 (2014)

146. “Porous rubber cryogels: effect of the gel preparation temperature”

Z. Oztoprak, T. Hekimoglu, I. Karakutuk, D. C. Tuncaboylu, O. Okay, Polym. Bull. 71, 1983-1999 (2014)

145. “Surfactant-Induced Healing of Tough Hydrogels Formed via Hydrophobic Interactions”

A. Argun, M. P. Algi, D. C. Tuncaboylu, O. Okay, Colloid Polym. Sci. 292, 511-517 (2014)

144. “Autonomic self-healing in covalently crosslinked hydrogels containing hydrophobic domains”

D. C. Tuncaboylu, A. Argun, M. P. Algi, O. Okay, Polymer 54 (23), 6381-6388 (2013)

143. “Self-healing polyacrylic acid hydrogels”

U. Gulyuz, O. Okay, Soft Matter 9 (43), 10287-10293 (2013)

142. “Shape memory hydrogels via micellar copolymerization of acrylic acid and n-octadecyl acrylate in aqueous media”

C. Bilici, O. Okay. Macromolecules 46, 3125-3131 (2013)

141. “Tough interpenetrating Pluronic F127/polyacrylic acid hydrogels”

T. Baskan, D.C. Tuncaboylu, O. Okay. Polymer 54, 2979-2987 (2013)

140. “Macroporous silk fibroin cryogels.”

F. Ak, Z. Oztoprak, I. Karakutuk, O. Okay, Biomacromolecules 14, 719-727 (2013)

139. “Self-healing hydrogels formed in catanionic surfactant solutions.”

G. Akay, A. Hassan-Raeisi, D.C. Tuncaboylu, N. Orakdogen, S. Abdurrahmanoglu, W. Oppermann, O. Okay, Soft Matter 9, 2254-261 (2013)

138. “Swelling behavior of physical and chemical DNA hydrogels.”

P. Karacan P, H. Cakmak, O. Okay, J. Appl. Polym. Sci. 128, 3330-3337 (2013)

137. “Ethidium bromide binding to DNA cryogels.”

P. Karacan, O. Okay, React. Funct. Polym. 73, 442-450 (2013)

136. “Structure optimization of self-healing hydrogels formed via hydrophobic interactions.”

D. C. Tuncaboylu, A. Argun, M. Sahin, M. Sari, O. Okay, Polymer 53 (24), 5513-5522 (2012)

135. “Dynamics and large strain behavior of self-healing hydrogels with and without surfactants.”

D. C. Tuncaboylu, M. Sahin, A. Argun, W. Oppermann, O. Okay, Macromolecules 45 (4), 1991-2000 (2012)

134. “Diepoxide-triggered conformational transition of silk fibroin: Formation of hydrogels.”

I. Karakutuk, F. Ak, O. Okay, Biomacromolecules 13 (4), 1122-1128 (2012)

133. “Tough and self-healing hydrogels formed via hydrophobic interactions.”

D. C. Tuncaboylu, M. Sarı, W. Oppermann, O. Okay, Macromolecules 44, 4997-5005 (2011)

132. “Macroporous, responsive DNA cryogel beads.”

N. Orakdogen, P. Karacan, O. Okay, React. Funct. Polym. 71, 782-790 (2011)

131. “DNA hydrogels: New functional soft materials.”

O. Okay, J. Polym. Sci. B: Polymer Phys. 49, 551-556 (2011)

130. “Solution cross-linked natural rubber (NR) / clay aerogel composites.”

T. Pojanavaraphan, L. Liu, D. Ceylan, O. Okay, R. Magaraphan, D. A. Schiraldi, Macromolecules 44, 923-931 (2011)

129. “Dodecyl methacrylate as a crosslinker in the preparation of tough polyacrylamide hydrogels.”

S. Abdurrahmanoglu, M. Cilingir, O. Okay, Polymer 52, 694-699 (2011)

128. “Self-oscillating pH-responsive cryogels as possible candidates of soft materials for generating mechanical energy”

C. Bilici, S. Karayel, T.T. Demir, O. Okay, J. Appl. Polym. Sci. 118, 2981-2988 (2010)

127. “Macroporous rubber gels as reusable sorbents for the removal of oil from surface waters”

I. Karakutuk, O. Okay, React. Funct. Polym. 70, 585-595 (2010)

126. “Evidence of strain hardening in DNA gels”

N. Orakdogen, B. Erman, O. Okay, Macromolecules 43 (3), 1530-1538 (2010)

125. “Effect of nanoscale interactions on the rheological behavior of polymer – clay nanocomposite hydrogels”

S. Abdurrahmanoglu, O. Okay, J. Appl. Polym. Sci. 116, 2328-2335 (2010)

124. “Hierarchically macroporous cryogels of polyisobutylene and silica nanoparticles”

D.C. Tuncaboylu, O. Okay, Langmuir 26 (10), 7574–7581 (2010)

123. “Design of high-toughness polyacrylamide hydrogels by hydrophobic modification”

S. Abdurrahmanoglu, V. Can, O. Okay, Polymer 50, 5449-5455 (2009)

122. “Formation of hydrogels by simultaneous denaturation and cross-linking of DNA”

F. Topuz, O. Okay, Biomacromolecules 10, 2652-2661 (2009)

121. “Preparation and characterization of single-hole macroporous organogel particles of high toughness and superfast responsivity”

D.C. Tuncaboylu, O. Okay O, Eur. Polym. J. 45 (7), 2033-2042 (2009)

120. “Evaluation of butyl rubber as sorbent material for the removal of oil and polycyclic aromatic hydrocarbons from seawater”

D. Ceylan, S. Dogu, B.Karacik, S.D. Yakan, O.S. Okay, O. Okay, Environ. Sci. Technol. 43 (10), 3846-3852 (2009)

119. “Macroporous hydrogel beads of high toughness and superfast responsivity”

F. Topuz, O. Okay, React. Funct. Polym. 69, 273-280 (2009)

118. “Collapse of acrylamide-based polyampholyte hydrogels in water”

S. Dogu, M. Kilic, O. Okay, J. Appl. Polym. Sci. 113, 1375-1382 (2009)

117. “Rheological behavior of responsive DNA hydrogels”

F. Topuz, O. Okay, Macromolecules 41, 8847-8854 (2008)

116. “Homogeneous poly(acrylamide) hydrogels made by large size, flexible dimethacrylate crosslinkers”

S. Abdurrahmanoglu, O. Okay, Macromolecules 41, 7759-7761 (2008)

115. “Tough organogels based on polyisobutylene with aligned porous structures”

S. Dogu, O. Okay, Polymer 49, 4626-4634 (2008)

114. “Formation of macroporous poly(acrylamide) hydrogels in DMSO/water mixture: Transition from cryogelation to phase separation copolymerization”

M. M. Ozmen, O. Okay, React. Funct. Polym 68, 1467-1475 (2008)

113. “Preparation of Homogeneous Hydrogels by Controlling the Crosslinker Reactivity and Availability”

S. Abdurrahmanoglu, O. Okay, J. Macromol. Sci. A: Pure and Appl. Chem. 45, 769-775 (2008)

112. “Equilibrium swelling behavior and elastic properties of polymer-clay nanocomposite hydrogels”

S. Abdurrahmanoglu, V. Can, O. Okay, J. Appl. Polym. Sci. 109, 3714-3724 (2008)

111. “Preparation of macroporous poly(acrylamide) hydrogels in DMSO/water mixture at subzero temperatures“

M.M. Ozmen, M.V. Dinu, O. Okay, Polymer Bull. 60, 169-180 (2008)

110. “Macroporous polyisobutylene gels: A novel tough organogel with superfast responsivity”

D. Ceylan, O. Okay, Macromolecules 40, 8742-8749 (2007)

109. “Unusual swelling behavior of polymer-clay nanocomposite hydrogels”

V. Can, S. Abdurrahmanoglu, O. Okay, Polymer 48, 5016-5023 (2007)

108. “Preparation of homogeneous polyacrylamide hydrogels by free-radical crosslinking copolymerization”

E. A. Kuru, N. Orakdogen, O. Okay, Eur. Polym. J. 43, 2913-2921 (2007)

107. “Preparation of Macroporous Acrylamide-based Hydrogels: Cryogelation under Isothermal Conditions”

M. M. Ozmen, M. V. Dinu, E. S. Dragan, O. Okay, J. Macromol. Sci. A: Pure and Appl. Chem. (2007)

106. “Polyacrylamide - clay nanocomposite hydrogels: Rheological and light scattering characterization”

O. Okay, and W. Oppermann, Macromolecules 40, 3378-3387 (2007)

105. “Influence of the initiator system on the spatial inhomogeneity in acrylamide-based hydrogels”

N. Orakdogen N, and O. Okay, J. Appl. Polym. Sci. 103, 3228-3237 (2007)

104. “Freezing as a path to built macroporous structures: Superfast responsive polyacrylamide hydrogels”

M. V. Dinu, M. M. Ozmen, E. S. Dragan, and O. Okay, Polymer 48, 195-204 (2007)

103. “Network Development in Mixed Step-Chain Growth Thiol-Vinyl Photopolymerizations”

S.K. Reddy, O. Okay, and C.N. Bowman, Macromolecules 39, 8832-8843 (2006)

102. “Correlation between crosslinking efficiency and spatial inhomogeneity in poly(acrylamide)hydrogels”

N. Orakdogen, and O. Okay, Polymer Bulletin 57, 631-641 (2006)

101. “Superfast responsive ionic hydrogels: Effect of the monomer concentration”

M.M. Ozmen, and O. Okay, J. Macromol. Sci. A: Pure and Appl. Chem. 43, 1215-1225 (2006)

100. “Phase transition of acrylamide-based polyampholyte gels in water”

D. Ceylan, V. Can, and O. Okay, J. Macromol. Sci. A: Pure and Appl. Chem. 43, 1635-1649 (2006)

99. “Swelling-deswelling kinetics of poly(acrylamide) hydrogels and cryogels”

D. Ceylan, M.M. Ozmen, and O. Okay, J. Appl. Polym. Sci. 99, 319-325 (2006)

98. “Effect of initial monomer concentration on the equilibrium swelling and elasticity of hydrogels”

N. Orakdogen, and O. Okay, Eur. Polym. J. 42 (2006)

97. “Swelling-deswelling kinetics of poly(N-isopropylacrylamide) hydrogels formed in PEG solutions”

Y. Dogu, and O. Okay, J. Appl. Polym. Sci. 99, 37-44 (2006)

96. “Reentrant conformation transition in poly(N,N-dimethylacrylamide) hydrogels in water-organic solvent mixtures”

N. Orakdogen, and O. Okay, Polymer 47, 561-568 (2006)

95. “Suppression of inhomogeneities in hydrogels formed by free-radical crosslinking copolymerization”

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179. O. Okay, „Hidrofobik Etkileşimlerle Oluşmuş Kendini Onarabilen Hidrojeller“ (invited) 6. Ulusal Polimer Bilim ve Teknoloji Kongresi, Ankara, September **2016**

178. O. Okay, „Yeni Nesil Biyouyumlu Jeller ve Polimer İskeletleri“ 28.Ulusal Kimya Kongresi“ (invited) Mersin, August **2016**

177. O. Okay, V. Can, Z. Kochovski, V. Reiter, N. Severin, M. Siebenbürger, B. Kent, J. Just, J.P. Rabe, M. Ballauff, "Nanoscale structure of self-healing hydrogels formed via hydrophobic interactions“ (invited)

World Polymer Congress, Istanbul, July **2016**

176. Arğun, A., Okay, O. “Nonionic double and triple network hydrogels”. Polymer Networks Group Meeting, Stockholm, Sweden, June **2016** (lecture)

175. Su, E., Okay, O. “Supramolecular polyampholyte hydrogels formed via hydrophobic and ionic interactions”. Polymer Networks Group Meeting, Stockholm, Sweden, June **2016** (poster)

174. Okay, O. "Nanoscale structure of self-healing hydrogels formed via hydrophobic interactions“

Humboldt Universitaet, Physics Department, Adlershof, Berlin, November **2015**

173. Okay, O. "Supramolecular self-healing hydrogels based on synthetic and natural polymers“ (keynote speaker)

Helmholtz-Virtual Institute, Multifunctional Biomaterials for Medicine, Teltow; Berlin, September **2015**

172. Okay, O., Gulyuz, U., Bilici, C., Kurt, B. "Şekil-hafızalı, kendi kendini onarabilen akıllı polimer malzemeler (keynote speaker)

27. Ulusal Kimya Kongresi, Çanakkale, Ağustos **2015**

171. Gulyuz, U., Okay, O." Sıcaklığa duyarlı kendi kendini onarabilen hidrojeller (bildiri)

27. Ulusal Kimya Kongresi, Çanakkale, Ağustos **2015**

170. Yetişkin, B., Okay, O., "Mekanik dyanımı yüksek ipek fibroin kriyojelleri (poster)

27. Ulusal Kimya Kongresi, Çanakkale, Ağustos **2015**

169. Okay, O. “Hydrogels with self-healing and shape-memory properties tuned by hydrophobic interactions” (seminar), Helmholtz Zentrum Berlin, Soft Matter and Functional Materials Institute, Berlin, Almanya, May **2015**.

168. Okay, O. “Supramolecular self-healing hydrogels with shape-memory behavior” (keynote lecture), International Biomedical Engineering Congress, Girne, KKTC, March **2015**.

167. Okay, O.. "Neden Kimya? Neden İTÜ Kimya?” İTÜ Kimya Kulübü, Ekim **2014**

166. Okay, O.. "Synthesis and structure-property relationships for polymeric cryogels” (invited lecture)

248th ACS National Meeting, San Francisco, CA, August **2014**

165. Okay, O.. "Hydrogels with self-healing and shape-memory properties tuned by hydrophobic interactions” (lecture)

248th ACS National Meeting, San Francisco, CA, August **2014**

164. Okay, O. “Self-healing hydrogels with shape memory behavior via hydrophobic interactions” (lecture)

Bogazici Universitesi, İstanbul, May **2014**

163. Okay, O. “Ekomalzemeler” (lecture)

Sürdürülebilir Ekosistem Günleri, SDKM, İTU, İstanbul, April **2014**

162. Okay, O. “Polimer Jeller ve İstanbul Boğazını Petrol Döküntülerinden Kurtaracak Yeni Bir Sünger Malzeme” (lecture)

İstanbul Erkek Lisesi, İstanbul, January **2014**

161. Okay, O. “Petrol döküntülerinin deniz ekosistemi ve atık sulardan uzaklaştırılması için tekra-kullanılabilir kauçuk sorbenti üretimi ve uygulaması” (invited)

17. Sıvı Hal Sempozyumu, Baltalimanı, İstanbul, December **2013**

160. Okay, O. “Kimyada teknolojik gelişmeler” (lecture)

Güneşli Doğa Koleji, İstanbul, December **2013**

159. Lozinsky, V.I., Okay, O. “What are the polymeric cryogels and how they are formed?” (invited)

13. Ukrainian Conference on Macromolecules, Kiev, Ukraine, October **2013**

158. Ström, A., Schuster, E., Okay, O., Larsson, A. “Macroporous hyaluronan gels” (poster)

EPNOE 2013, Polysaccharides and polysaccharide-derived products, from basic science to applications, Nice, France, October **2013**

157. Okay, O.. "Kendini onarabilen akıllı malzemeler” (invited)

Anadolu Üniversitesi, Eskişehir, May **2013**

156. Okay, O.. "Formation of macroporous DNA and silk fibroin gels via cryogelation” (lecture)

245th ACS National Meeting, New Orleans, LA, April **2013**

155. A. Hassan-Raeisi, O. Okay, W. Oppermann. “Dynamics in polyacrylamide hydrogels formed via hydrophobic associations” (poster)

Makromolekulares Kolloquium Freiburg, February **2013**

154. Okay, O.. "Kimya’daki Teknolojik Gelişmeler ve Önceliklerimiz” (invited)

TÜBİTAK-BİDEB 2229 Eğitim Çalıştayı, Canakkale, February **2013**

153. Okay, O.. "Self-healing hydrogels and silk cryogels via hydrophobic associations” (lecture)

A.N. Nesmeyanov Institute of Organoelement Compounds, Moscow, Russia, November **2012**

152. Okay, O.. " Kendi Kendini Onarabilen Hidrojellerin Tasarımı” (Bahattin Baysal Özel Oturumu, bildiri)

26. Ulusal Kimya Kongresi, Muğla, October **2012**

151. Bilici, C., Okay, O.. "Kristalin Bölgeler İçeren Hidrojeller” (bildiri)

26. Ulusal Kimya Kongresi, Muğla, October **2012**

150. Baskan, T., Tuncaboylu, D. C., Topcu, G., Okay, O.. "İlaç Taşıyıcı Sistemlerde Kullanılabilecek pH ve Sıcaklığa Duyarlı Hidrojellerin Sentezi ve Karakterizasyonu” (poster)

26. Ulusal Kimya Kongresi, Muğla, October **2012**

149. Oztoprak, Z., Karakutuk, I., Okay, O.. " İpek Fibroin Jellerinin Kuvvet Altında Sertleşmesi” (poster)

26. Ulusal Kimya Kongresi, Muğla, October **2012**

148. Ak, F., Karakutuk, I., Okay, O.. "İpek Fibroin Jellerinin Mekanik Özellikleri” (poster)

26. Ulusal Kimya Kongresi, Muğla, October **2012**

147. Akay, G., Tuncaboylu, D.C., Abdurrahmanoğlu, S., Orakdöğen, N., Oppermann, W., Okay, O.. "Anyonik/Katyonik Misel Karışımlarında Kendini-Onarabilen Hidrofobik Modifiye Hidrojellerin Sentezi” (poster)

26. Ulusal Kimya Kongresi, Muğla, October **2012**

146. Cakmak, H., Okay, O. "Fiziksel ve Kimyasal Çapraz Bağlı DNA Hidrojelleri” (poster)

26. Ulusal Kimya Kongresi, Muğla, October **2012**

145. Sahin, M., Okay, O. "Hidrofobik Modifiye Poliakrilamid Jellerinde Hidrofobik Blok Uzunluğunun Reolojik ve Mekanik Özelliklere Etkisi” (poster)

26. Ulusal Kimya Kongresi, Muğla, October **2012**

144. Argun, A., Tuncaboylu, D. C., Okay, O. " Hidrofobik Modifiye Poliakrilamid Hidrojellerinin Mekanik Özelliklerine Yüzey Aktif Madde Konsantrasyonunun Etkisi” (poster)

26. Ulusal Kimya Kongresi, Muğla, October **2012**

143. Altun, B. U.., Okay, O. " Statik Işık Saçınım Tekniği ile Poliakrilamid Jellerinde İnhomojenitenin İncelenmesi” (poster)

26. Ulusal Kimya Kongresi, Muğla, October **2012**

142. Yildiz, E., Okay, O. " Poliakrilamid Hidrojellerinin Sentezi ve Karakterizasyonu” (poster)

26. Ulusal Kimya Kongresi, Muğla, October **2012**

141. Okay, O., Design of macroporous gels with various architectures. Korea Institute of Science and Technology (KIST), Seoul, South Korea, September **2012**. (lecture).

140. Akay, G., Tuncaboylu, D.C., Abdurrahmanoğlu, S., Orakdöğen, N., Oppermann, W., Okay, O. Hydrophobically associated self-healing hydrogels formed in catanionic surfactant solutions. Polymeric and Self-assembled Hydrogels, London, September **2012**. (poster).

139. Karakutuk, I., Ak, F., Oztoprak, Z., Okay, O., İpek fibroin hidrojelleri ve kriyojelleri. 4. Ulusal Polimer Kongresi, Çanakkale, September **2012**. (davetli konuşma).

138. Argun, A., Tuncaboylu, D. C., Okay, O., Hidrofobik modifiye poliakrilamid hidrojellerinin mekanik özelliklerine yüzey aktif madde konsantrasyonunun etkisi. 4. Ulusal Polimer Kongresi, Çanakkale, September **2012**. (poster).

137. Okay, O., Kendini onarabilen yumuşak malzemeler. 3. Fiziksel Kimya Günlari Kongresi, Balıkesir, July **2012**. (invited).

136. Tuncaboylu, D. C., Argun, A., Sahin, M., Oppermann, W., Okay, O., Self-healing hydrogels via hydrophobic associations. IUPAC MACRO2012 World Polymer Congress, Virginia Tech Campus, June **2012**. (lecture).

135. Argun, A., Tuncaboylu, D. C., Okay, O., Effect of surfactant concentration on the mechanical properties of hydrophobically modified polyacrylamide hydrogels. IUPAC MACRO2012 World Polymer Congress, Virginia Tech Campus, June **2012**. (poster).

134. Karacan, P., Okay, O., Synthesis and characterization of macroporous DNA hydrogels. IUPAC MACRO2012 World Polymer Congress, Virginia Tech Campus, June **2012**. (poster).

133. Okay, O. Akıllı polimerik malzemeler. Boğaziçi Üniversitesi Öğrencileri Kimya Sempozyumu 1, Mayıs **2012.**

132. Okay, O., Self-healing hydrogels formed via hydrophobic interactions. Mini-workshop, Chalmers University of Technology, Gothenburg, Sweden, December **2011**. (lecture).

131. Okay, O., DNA versus silk fibroin hydrogels. Recent Advances in Synthetic and Biological Gels, One-Day Workshop, İTÜ, September **2011**. (lecture).

130. Argun, A., Tuncaboylu, D. C., Okay, O. Solubilization of large hydrophobes in worm-like micelles: Effect of temperature and electrolyte concentration. Recent Advances in Synthetic and Biological Gels, One-Day Workshop, September, ITU & Polymers for Advanced Technologies 2011, Lodz, Poland, October **2011**. (poster).

129. Bilici, C., Okay, O. Investigation of the Crystalline Structure and Thermomechanical Properties of Temperature-Sensitive Hydrogels. Recent Advances in Synthetic and Biological Gels, One-Day Workshop, September, ITU & Polymers for Advanced Technologies 2011, Lodz, Poland, October **2011**. (poster).

128. Kopan, D., Tuncaboylu, D. C., Okay, O. Self-healing polyacrylamide hydrogels by photoinitiated free radical polymerization. Recent Advances in Synthetic and Biological Gels, One-Day Workshop, İTÜ, September **2011**. (poster).

127. Ak, F., Karakutuk, I., Okay, O. Mechanical Properties of Silk Fibroin Cryogels and Hydrogels. Recent Advances in Synthetic and Biological Gels, One-Day Workshop, September, ITU & Polymers for Advanced Technologies 2011, Lodz, Poland, October **2011**. (poster).

126. Akay, G., Tuncaboylu, D. C., Abdurrahmanoglu, S., Orakdogen, N., Oppermann, W., Okay, O. Hydrogels Formed via Hydrophobic Interactions in Mixed Micelle Solutions. Recent Advances in Synthetic and Biological Gels, One-Day Workshop, September, ITU & Polymers for Advanced Technologies 2011, Lodz, Poland, October **2011**. (poster).

125. Cakmak, H., Okay, O. DNA Gelation by Heating – Cooling Process. Recent Advances in Synthetic and Biological Gels, One-Day Workshop, September, ITU & Polymers for Advanced Technologies 2011, Lodz, Poland, October **2011**. (poster).

124. Sahin, M., Tuncaboylu, D. C., Okay, O. Solubilization of self-healing polyacrylamide hydrogels in surfactant solutions. Recent Advances in Synthetic and Biological Gels, One-Day Workshop, September, ITU & Polymers for Advanced Technologies 2011, Lodz, Poland, October **2011**. (poster).

123. Karacan, P., Okay, O. Synthesis and characterization of macroporous DNA hydrogels. Recent Advances in Synthetic and Biological Gels, One-Day Workshop, İTÜ, September **2011**. (poster).

122. Oztoprak, Z., Tuyncaboylu, D. C., Karakutuk, I., Okay, O. Preparation and Characterization of Macroporous Organogels Based on Polybutadiene Rubber. Recent Advances in Synthetic and Biological Gels, One-Day Workshop, September, ITU & Polymers for Advanced Technologies 2011, Lodz, Poland, October **2011**. (poster).

121. Argun, A., Tuncaboylu, D., Okay, O. "Miseller Polimerizasyonu: Hidrofobik Monomerlerin Çözünürlüğüne Elektrolit ve Sıcaklık Etkisi", (poster)

25. Ulusal Kimya Kongresi, Erzurum, July **2011**

120. Bilici, C., Okay, O. "Sıcaklığa Duyarlı Hidrojellerin Kristalin Yapısının ve Termomekanik Özelliklerinin İncelenmesi", (poster) 25. Ulusal Kimya Kongresi, Erzurum, July **2011**

119. Tuncaboylu, D. C., Okay, O. "Kendi Kendini İyileştirebilen (self-healing) Poliakrilamid Jellerinin Miseller Kopolimerizasyonu ile Sentezi ve Karakterizasyonu", (lecture) 25. Ulusal Kimya Kongresi, Erzurum, July **2011**

118. Kopan, D., Tuncaboylu, D., Okay, O. "Poliakrilamid Jellerinin Mekanik Özellikleri ve Şişme DavranışlarınaYüzey Aktif Madde ve Hidrofob Blokların Etkisi", (poster) 25. Ulusal Kimya Kongresi, Erzurum, July **2011**

117. Ak, F., Karakutuk, I, Okay, O. "İpek Jellerinin Mekanik Özellikleri", (poster) 25. Ulusal Kimya Kongresi, Erzurum, July **2011**

116. Okay, O. "Soft and smart materials with self-healing abilities", Clausthal Technical University, May **2011** (lecture)

115. Okay, O. "Akıllı polimerik malzemeler", TÜBA Üniversite Konferansları Programı, Hitit Üniversitesi, Çorum, Mart **2011**

114. Okay, O. "Akıllı polimerik malzemeler", İTÜ Kimya Kulübü, SDKM, Mart **2011** (lecture)

113. Okay, O. "Akıllı malzemeler", Kocaeli Üniversitesi, Nisan **2011** (lecture)

112. Okay, O. "Soft and smart materials with self-healing abilities", ODTÜ Kimya Bölümü, Ankara, Nisan **2011** (lecture)

111. Okay, O. "Soft and smart materials with self-healing abilities", Sabancı Üniviversitesi, Nisan **2011** (lecture)

110. Okay, O. “Swelling and elasticity of hydrogels and cryogels of DNA” Department of Biotechnology, Lund University, Sweden, September **2010** (lecture)

109. Orakdogen, N., Erman, B., Topuz, F., Okay, O. “Swelling and Elasticity of Responsive DNA Hydrogels” 20th Polymer Networks Group Meeting, Goslar, Germany, Aug. / Sep. **2010** (lecture)

108. Orakdogen, N., Okay, O. “Poly(N,N-Dimethylacrylamide) Hydrogels: Formation by Free Radical Crosslinking Copolymerization, Characterization and Gel Properties”. 20th Polymer Networks Group Meeting, Goslar, Germany, Aug. / Sep. **2010** (lecture)

107. Tuncaboylu, D.C., Okay O. ”Organic - Inorganic Hybrid Cryogels with Two Generations of Pores”. 20th Polymer Networks Group Meeting, Goslar, Germany, Aug. / Sep. **2010** (poster)

106. Okay, O. "Hidrojellerde hidrofobik etkileşmeler". 24. Ulusal Kimya Kongresi, Zonguldak, June **2010** (invited)

105. Karakutuk, I., Okay, O. "Makrogözenekli Kauçuk Jellerinin Sentezi ve Deniz Yüzeyindeki Petrol Döküntülerinin Toplanmasında Kullanımı". 24. Ulusal Kimya Kongresi, Zonguldak, June **2010** (poster)

104. Karacan, P., Okay, O. "DNA Jellerinin Aseton ve Tuz Çözeltileri İçerisindeki Şişme Davranışlarının İncelenmesi" 24. Ulusal Kimya Kongresi, Zonguldak, June **2010** (poster)

103. Bilici, C., Karayel, S., Okay, O. "Kendi Kendine Hareket Edebilen Kriyojel Sistemleri" 24. Ulusal Kimya Kongresi, Zonguldak, June **2010** (poster)

102. Okay, O. DNA Jellerinin Şişme ve Elastik Özellikleri. 3. Ulusal Polimer Kongresi, May **2010**, Izmit (invited)

101. Okay, O. "Design of macroporous gels with various architectures" Porous Hydrogels for Biomedical Applications: from Cytapheresis to Tissue Engineering. Summer School, Antalya **2009** (invited)

100. Orakdogen, N. Okay, O. “Chemically crosslinked DNA hydrogels and cryogels.” Porous Hydrogels for Biomedical Applications: from Cytapheresis to Tissue Engineering. Summer School, Antalya **2009** (poster)

99. Tuncaboylu, C.D., Okay, O. “Single-hole macroporous organogel particles”. Porous Hydrogels for Biomedical Applications: from Cytapheresis to Tissue Engineering. Summer School, Antalya **2009** (poster)

98. Karakutuk, I, Okay, O. “Formation conditions of macroporous gels with aligned porous structures.” Porous Hydrogels for Biomedical Applications: from Cytapheresis to Tissue Engineering. Summer School, Antalya **2009** (poster)

97. Abdurrahmanoglu, S., Okay, O. “Homogeneous polyacrylamide hydrogels made by large size, flexible dimethacrylate crosslinker”. APME, Dresden, **2009**, (poster)

96. Okay, O, "Soft and smart materials: Organogels, hydrogels, and DNA gels" Koc University, Science seminar, Istanbul, 12 November **2009**, (lecture)

95. Okay, O., Topuz, F., Abdurrahmanoglu, S., Ceylan, D. “Organojeller, hidrojeller, DNA jelleri: Mekanik özelliklerinin iyileştirilmesi için yeni yöntemler”. 23. Ulusal Kimya Kongresi, Sivas Cumhuriyet Üniversitesi, Sivas. June **2009** (invited)

94. Okay, O, "Akıllı jeller" Süleyman Demirel Üniversitesi, Kimya Bayramı, Isparta, 13 May **2009** (lecture)

93. Okay, O. "Makrogözenekli polimer jellerin tasarımında yeni metodlar ve ilerlemeler" 22. Ulusal Kimya Kongresi, Dogu Akdeniz Üniversitesi, Gazi Magosa, K.K.T.C, October **2008** (invited).

92. Ceylan D., Dogu, S., Okay, O. "Butil kauçuk esaslı organojeller: Hazırlama koşullarının etkisi" 22. Ulusal Kimya Kongresi, Dogu Akdeniz Üniversitesi, Gazi Magosa, K.K.T.C, October **2008** (poster).

91. Can, V., Abdurrahmanoglu, S., Okay, O. "Polimer-kil nanokompozit hidrojellerinin olağandışı şişme davranışları" (poster) 22. Ulusal Kimya Kongresi, Dogu Akdeniz Üniversitesi, Gazi Magosa, K.K.T.C, October **2008** (poster).

90. Cilingir, M., Okay, O. "Hidrofobik yan grupların poliakrilamid hidrojellerin inhomojenite derecesine etkisi" (poster) 22. Ulusal Kimya Kongresi, Dogu Akdeniz Üniversitesi, Gazi Magosa, K.K.T.C, October **2008** (poster).

89. Topuz, F., Okay, O. "DNA hidrojellerinin reolojik özelliklerinin incelenmesi" (poster) 22. Ulusal Kimya Kongresi, Dogu Akdeniz Üniversitesi, Gazi Magosa, K.K.T.C, October **2008** (poster).

88. Okay, O, "Akıllı ve yumuşak polimerik malzemeler" G.Y.T.E., Kocaeli, 15 January **2008** (lecture).

87. Ceylan, D., Ozmen, M.M., Dogu S., Okay, O., "Freezing as a path to build macroporous structures: Superfast responsive tough hydrogels and organogels" Chemical Physics Conference VIII, ITU, Istanbul, April **2008** (invited)

86. Okay, O, "ÖSS stresinden Mezuniyet stresine" İTÜ Kimya Kulübü Seminarları, İstanbul, 27 March **2008** (lecture).

84, 85. Okay, O. (a) Polymer-clay nanocomposite hydrogels: Synthesis and characterization, (b) Spatial inhomogeneities in polymer hydrogels. Technische Universitaet Dresden, Special Physical Chemistry Section, Dresden, Germany, **2007** (2 lectures)

83. Okay, O., Ozmen, M.M., Dinu M.V., Ceylan D., Can V., "Strategies toward the synthesis of fast responsive gels with improved mechanical properties" European Polymer Congress 2007, Portoroz, Slovenia. 2-6 July **2007** (invited)

82. Dinu, M.V., Ozmen, M.M., Dragan, E.S., Okay, O., "Synthesis of macroporous hydrogels from frozen monomer solutions under various experimental conditions" European Polymer Congress 2007, Portoroz, Slovenia, 2-6 July **2007** (poster)

81. Orakdogen, N., Okay, O "Correlation between crosslinking efficiency and spatial inhomogeneity in poly(acrylamide) hydrogels" Polymer Networks Group Conference, Sheffield, England, September **2006** (poster).

80. Ceylan, D., Okay, O. "Swelling-deswelling kinetics of ionic poly(acrylamide) hydrogels and cryogels" Polymer Networks Group Conference, Sheffield, England, September **2006** (poster).

79. Can, V., Okay, O "Phase transition of acrylamide-based polyampholyte gels in water" Polymer Networks Group Conference, Sheffield, England, September **2006** (poster).

78. Okay, O. Design of nano-and micro-scale structures in polymer hydrogels. Polymers: Materials of Advanced Technologies and in Biology, A German-Turkish Workshop, Max-Planck Institute for Polymer Research, Mainz, Germany29-31, August **2006** (lecture).

77. Okay, O. Design of nano-and micro-scale structures in polymer hydrogels. "Petru-Poni" Institute of Macromolecular Chemistry, Iasi, Romania, November **2006** (lecture)

76. Okay, O. Swelling and elasticity of hydrogels formed by free-radical mechanism. "Petru-Poni" Institute of Macromolecular Chemistry, Iasi, Romania, November **2006** (lecture).

75. Okay, O. "Yumuşak ve akıllı malzemeler: Jeller" Kocaeli Üniversitesi Kimya Bölümü Seminarı, İzmit, Kocaeli, 31 March **2006** (lecture)

74. Okay, O. "Hidrojellerde donmuş konsantrasyon dalgalanmaları" 20. Ulusal Kimya Kongresi, Erciyes Üniversitesi, Kayseri, September **2006** (main lecture)

73. Okay, O., Orakdogen, N., Kizilay MY. "Supression of inhomogeneities in gels formed by free-radical mechanism" APME 6, Istanbul, August **2005** (lecture)

72. Can, V., Okay, O "Shake gels based on laponite-PEO mixtures: Effect of polymer molecular weight" Polymer Gels and Networks, 44th Microsymposium of P.M.M., Prague, Czech Republic, 10-14 July **2005** (poster).

71. Orakdogen, N., Okay, O "Formation and properties of poly(N,N-dimethylacrylamide) hydrogels" Polymer Gels and Networks, 44th Microsymposium of P.M.M., Prague, Czech Republic, 10-14 July **2005** (poster).

70. Kizilay, M.Y., Okay, O "Effect of swelling on spatial inhomogeneity in poly(acrylamide) gels formed at various monomer concentration" Polymer Gels and Networks, 44th Microsymposium of P.M.M., Prague, Czech Republic, 10-14 July **2005** (poster).

69. Ozmen, M.M., Okay, O "Effect of preparation temperature on properties of gels based on sodium 2-acrylamido-2-methylpropane-1-sulfonate" Polymer Gels and Networks, 44th Microsymposium of P.M.M., Prague, Czech Republic, 10-14 July **2005** (poster)..

68. Okay, O, "Jellerde nano ve mikro bölgelerin dizaynı" İTÜ Fizik Bölümü Seminarları, İTÜ, İstanbul, 8 Nisan **2005** (lecture).

67. Okay, O. "Swelling, elasticity and inhomogeneity of gels formed by free-radical crosslinking mechanism" Polymer Gels and Networks, 44th Microsymposium of P.M.M., Prague, Czech Republic, 10-14 July **2005**. (main lecture)

66. Okay, O. "Soft and smart materials: Gels" Bilkent Kimya Bölümü Seminarı, Bilkent, Ankara, 9 November **2005** (lecture)

65. Okay, O, "Akıllı Malzemeler" İTÜ Kimya Bölümü Seminarları, İTU, Istanbul, 13 February **2004** (lecture)

64. Okay, O, "Akıllı Malzemeler" Marmara Universitesi, İstanbul, 12 Mays **2004** (lecture)

63. Kızılay, MY, Okay, O., "Effect of initial monomer concentration on spatial inhomogeneity in poly(acrylamide) gels" Biennial Meeting of the IoP Polymer Physics Group, Univ. of Reading, Polymer Science Centre, Reading, UK, 10-12 September **2003** (poster).

62. Özmen MM, Okay, O, "Sıcaklığa Duyarlı İyonik Poli( N-t- Butilakrilamid-Co- Akrilamid) Hidrojellerinin Şişme Özellikleri ve Elastik Davranışı" 17. Ulusal Kimya Kongresi, İstanbul Üniv., Istanbul, September **2003** (poster)

61. Okay, O, "Polimerik Malzemelerin Bugünü ve Yarını", Yapı Malzemesi Kurultayı 2003, Lütfi Kırdar Kongre ve Sergi Sarayı, İstanbul 8-9 December 2003, (invited)

60. Okay, O, "Polimerik Jeller Araştırma laboratuvarı" Nanoteknoloji ve Nanobiyoteknoloji Toplantısı, Silivri Klassis Hotel, İstanbul, 20-21 December **2003** (lecture)

59. Okay, O., "Swelling and elasticity of hydrogels in polymer melt and in polymer solutions" The Eight International Conference on Chemistry and Physical Chemistry of Oligomers, Chernogolovka, Russia, 9-14 September **2002** (invited)

58. Okay, O, "Jellerde spinodal decomposition ve faz diyagramları" İTÜ Fizik Bölümü Seminarları, İTÜ, İstanbul, February **2002** (lecture)

57. Durmaz, S., Sayil, C, Okay, O., Inci, MN, Taralp, A., Erman, B., "Elasticity measurements of swollen crosslinked microspheres attached to walls using optical microscopy" Material Research Society Spring 2000 Meeting, Symposium FF: Interfaces, Adhesion, and Processing in Polymer Systems, San Francisco, CA, **2000** (lecture)

56. Okay, O. "Swelling of hydrogels in polymer solutions" World Polymer Congress, IUPAC MACRO 2000, 38th Macromolecular IUPAC Symposium, Warsaw, Poland 9-14 July **2000** (lecture)

55. Melekaslan, D., Okay, O. "Swelling of Poly(NIPA) gels in PEG solutions: Double re-entrant swelling transition" World Polymer Congress, IUPAC MACRO 2000, 38th Macromolecular IUPAC Symposium, Warsaw, Poland, 9-14 July **2000** (poster)

54. Durmaz, S., Sayil, C, Okay, O. "Phase separation during the formation of poly(acrylamide) hydrogels" World Polymer Congress, IUPAC MACRO 2000, 38th Macromolecular IUPAC Symposium, Warsaw, Poland, 9-14 July **2000** (poster)

53. Okay, O., Durmaz, S., Erman, B. "Solution crosslinked poly(isobutylene) gels: Synthesis and swelling behavior" 15th Polymer Networks Group Meeting, Polymer Networks'2000, Formation-Structure-Properties, Cracow, Poland, 17-21 July **2000** (lecture)

52. Durmaz, S., Okay, O., "Gel growth in free radical crosslinking polymerization of acrylamide: Effect of inactive gel radicals" 15th Polymer Networks Group Meeting, Polymer Networks'2000, Formation-Structure-Properties, Cracow, Poland, 17-21 July **2000** (poster)

51. Melekaslan, D., Okay, O. "Swelling of strong polyelectrolyte hydrogels in PEG solutions: Effect of ion pair formation on the polymer collapse" 15th Polymer Networks Group Meeting, Polymer Networks'2000, Formation-Structure-Properties, Cracow, Poland, 17-21 July **2000** (poster)

50. Sayil, C., Okay, O., "Effect of synthesis conditions on the structure of Poly(NIPA) gels" 15th Polymer Networks Group Meeting, Polymer Networks'2000, Formation-Structure-Properties, Cracow, Poland, 17-21 July **2000** (poster)

49. Inci, MN, Erman, B., Durmaz, S., Okay, O., "Thermomechanical properties of gels: Statistics and dynamics" Material Research Society Fall 2000 Meeting, Symposium NN: Biomaterials for drug delivery, San Francisco, CA, **2000** (lecture).

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46. Sayıl, Ç., Okay, O, "Yüksek Spesifik Yüzey Alanlı Karbon Küreciklerinin Sentezi" 14. Ulusal Kimya Kongresi, Dicle Univ., Diyarbakır, September **2000** (poster)

45. Sayil, Ç. and Okay, O., "Poly(NIPA) jellerinin sisme davranislari" 13. Ulusal Kimya Kongresi, 19 Mayis Univ., Samsun, September **1999** (poster)

44. Melekaslan, D. and Okay, O., "AAm/AMPS ve AAm/MAPTAC esasli jellerin PEG çözeltilerinde sisme davranislari" 13. Ulusal Kimya Kongresi, 19 Mayis Univ., Samsun, September **1999** (poster)

43. Durmaz, S. and Okay, O., "AAm - AMPS esasli hidrojeller: Sentez ve Karakterizasyon" 13. Ulusal Kimya Kongresi, 19 Mayis Univ., Samsun, September **1999** (poster)

42. Okay, O. “Formation of heterogeneous networks by free-radical crosslinking copolymerization” Polymer Networks 98, 14th Polymer Networks Group International Conference, June 28 - July 3, 1998, The Norwegian University of Science and Technology, NTNU, Trondheim, Norway, June 28 - July 3, **1998** (lecture)

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39. Durmaz, S., Keskinel, M., and Okay, O., ‘Akrilamid, 2-akrilamido-2-metilpropansulfonik asit sodyum tuzu, N,N-metilenbisakrilamidin terpolimerizasyonunda jel olusumunun incelenmesi’ 12. Ulusal Kimya Kongresi, Trakya Üniv., Edirne, September **1998** (poster)

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37. Kayaman, N., Okay, O., and Baysal, BM., ‘Poliakrilamid jellerinin düz zincirli polimer çözeltilerinde faz geçisleri’ 12. Ulusal Kimya Kongresi, Trakya Üniv., Edirne, September **1998** (poster)

36. Akkan, U. and Okay, O., “Poliakrilamid jellerinde kinetik olarak donmus yapilarin olusum mekanizmasi’ 12. Ulusal Kimya Kongresi, Trakya Üniv., Edirne, September **1998** (poster)

35. Acir, Z. and Okay, O., ‘Stiren/divinilbenzen monomerlerinin serbest-radikal çaprazbag kopolimerizasyonunun jellesme öncesi ve sonrasi kinetik simülasyonu’ 12. Ulusal Kimya Kongresi, Trakya Üniv., Edirne, September **1998** (poster)

34. Okay, O. “Inhomogeneous and heterogeneous network formation by free-radical polymerization” 4th Brazilien Polymer Conference, Bahia-Salvador, Brasil. 28.09 / 2.10.**1997** (invited)

33. Akkan, U., and Okay, O., “Poliakrilamid jellerinde kinetik olarak donmus yapilarin incelenmesi” 11. Ulusal Kimya Kongresi, 100. Yil Üniv., Van, June **1997** (poster)

32. Kaya, D., Okay, O., Pekcan, Ö., “Free-radical Crosslinking Copolymerization of Styrene and Divinylbenzene: Real Time Monitoring of the Gel Effect By Using Fluorescence Probe” 4. Statistical Physics Days, ITÜ Maçka Tesisleri, **1997** (short talk)

31. Balimtas, K. N., and Okay, O., “Poliakrilamid jellerinin sentez sartlari ile özellikleri arasi iliskiler” 11. Ulusal Kimya Kongresi, 100. Yil Üniv., Van, June **1997** (poster)

30. Küçük, I, Kuyulu, A, Okay, O. “Çapraz bagli polimetilmetakrilat küreciklerinin gözenek yapilarina seyreltici kalitesininin etkisi” III. Kimya Mühendisligi Sempozyumu, Istanbul Teknik Üniversitesi, September **1996** (poster)

29. Okay, O. “Grundlagenforschung oder anwendungsorientierte Forschung?” Kolloquium der Alexander von Humboldt-Stiftung für Forschungsstipendiaten aus der Türkei, Hotel Büyük Efes, Izmir, 19-21 April **1996** (main lecture)

28. Kayaman, N., Kazan, D., Erarslan, A., Okay, O., Baysal, B.M., “Protein separation conditions by temperature-sensitive poly(N-isopropylacrylamide) gels” International Conference on Environmental Impact of Polymeric Materials, 23rd Aharon Katzir-Katchalsky Conference, Israil, 12 - 16 May **1996** (lecture)

27. Okay, O., “Formation of inhomogeneous and heterogeneous networks by chain crosslinking copolymerization” Polymer Networks 96, 13th Polymer Network Group International Conference, Doorn, Holland, 2-6 September **1996** (poster)

26. Kayaman, N., Okay, O., Baysal, B.M. “Poliakrilamid jellerinin etilen glikol oligomer çözeltileri içinde sisme davranislari” IV. Türkçe Konusan Ülkeler Polimer Sempozyumu, İTÜ, İstanbul, September **1996** (poster)

25. Pekcan, Ö., Yilmaz, Y., Okay, O., “Fluorescence technique for studying the sol-gel transition in free-radical crosslinking copolymerization of methyl methacrylate and ethylene glycol dimethacrylate, 2nd Statistical Physics Days, ITÜ Maçka Tesisleri, 13-14.07.**1995** (short talk)

24. Okay, O., “Critical properties for gelation in free-radical crosslinking copolymerization” 2nd Statistical Physics Days, ITÜ Maçka Tesisleri, 13-14.07.**1995** (lecture)

23. Okay, O., “Serbest-radikal mekanizma ile jel olusumunda kritik özellikler” Polimer ’1995 IV. Türkçe Konusan Ülkeler Polimer Sempozyumu, Tashkent, Özbekistan, 7-12 November **1995** (lecture)

22. Okay, O., Kurz, M., Lutz, K., and Funke, W. “Micro- and macrogelation in free-radical crosslinking polymerization of 1,4-divinylbenzene” 35th IUPAC Congress, Istanbul 14-19 August **1995** (lecture)

21. Naghash, H.J., Capek, I, and Okay, O. “Cyclization and multiple crosslinking in free radical crosslinking copolymerization” 35th IUPAC Congress, Istanbul, 14-19 August **1995**. (poster)

20. Naghash, H. J., Yildirim, H. and Okay, O., “Gel formation in free-radical crosslinking copolymerization” 35th IUPAC Congress, Istanbul, 14-19 August **1995** (poster)

19. Kayaman, N., Okay, O. and Baysal, B.M., “Swelling and collapse behaviour of polyacrylamide gels in polymer solutions” 35th IUPAC Congress, Istanbul, 14-19 August **1995** (poster)

18. Tanrisever, T., Okay, O. and Sönmezoglu, I.Ç., “Kinetics of emulsifier-free emulsion polymerization of methyl methacrylate - ethylene glycol dimethacrylate” 35th IUPAC Congress, Istanbul. 14-19 August **1995** (poster)

17. Naghash, H.J., Adali, T., Hacioglu, B., Yagci, Y., and Okay, O. “Gel formation in free-radical crosslinking copolymerization” Europhysics Conference on Gels, Balatonszeplak, Hungary, 25-29 September **1995** (poster)

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15. Okay, O., “Polimer Jelleri ve Uygulamalari” Kocaeli Üniversitesi, 22.02.**1995** (lecture).

14. Okay, O., “Mikro- ve makrojeller ve uygulamalari” TÜBITAK Marmara Arastirma Merkezi, Konferans salonu, April **1995** (lecture)

13. Okay, O., “Free-radical crosslinking copolymerization: Cyclization and diffusion control” NSF - TÜBITAK Workshop, "Novel Application of Light Scattering in Polymer Physics: Polymer Coil Collapse in the Poor Solvent Regime", Istanbul, May **1994** (lecture)

12. Okay, O., Naghash, H. J., Capek, I., “Free-radical crosslinking copolymerization: effect of cyclization on diffusion-controlled termination at low conversion” Prague Meetings on Macromolecules, Polymer Networks ‘94, Prague, Czech Republic, July **1994** (poster)

11. Naghash, H. J., Okay, O., “Serbest-radikal mekanizma ile agyapi sentezinde halka olusum reaksiyonlari, 10. Ulusal Kimya Kongresi, Bursa, September **1994** (poster)

10. Okay, O., “Serbest radikal polimerizasyonu ile agyapi olusum kinetigi” 9. Kimya ve Kimya Mühendisligi Simpozyumu, Trabzon, October **1993** (lecture)

9. Okay, O., “Makrogözenekli polimer agyapi kürecikleri” Yildiz Teknik Üniversitesi, 15.04.**1993** (lecture).

8. Gürün, Ç., Okay, O., “Gözeneklilik - sisme - asili vinil grup iliskileri” 7. Kimya ve Kimya Mühendisligi Simpozyumu, Gazimagusa, K.K.T.C, April **1991** (lecture).

7. Okay, O., “Gözenekli stiren-divinilbenzen kopolimerlerinde inhomojen çapraz baglanma” 4. Kimya ve Kimya Mühendisligi Simpozyumu, Elazig, June **1987** (lecture)

6. Okay, O., “Gözenekli stiren-maleikanhidrit-divinilbenzen kopolimer küreciklerinin sentez ve karakterizasyonlari” 3. Kimya ve Kimya Mühendisligi Simpozyumu, Ankara, September **1986**, (lecture)

5. Okay, O., “Büyük gözenekli stiren-divinilbenzen kopolimer küreciklerinin olusum kosullari” 2. Ulusal Kimya Simpozyumu, Ankara, September **1985** (lecture).

4. Altinbas, U., Ipekoglu, N., Okay, O., Balkas, T. I., “Bor selektif iyon degistirici reçine sentezi” 2. Ulusal Kimya Simpozyumu, September **1985** (poster)

3. Altinbas, U., Okay, O., Ipekoglu, N., “Bor'a özgü formaldehit esasli iyon degistirici reçine sentezi ve jeotermal sulara uygulanabilirligi” 2. Ulusal Kimya Simpozyumu, Ankara, September **1985** (poster)

2. Okay, O., “Stiren-divinilbenzen kopolimerlerinde gözeneklilik olusumuna polimerizasyon ortamindaki seyreltici niteliginin etkisi” 2. Ulusal Makromolekül Simpozyumu, Ankara, November **1985** (lecture).

1. Okay, O., “Polimer jellerinde faz geçisi” 1. Ulusal Makromolekül Kollokyumu, Ankara, December **1984** (lecture)

**REVIEWER OF JOURNALS**

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Gels

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Journal of Applied Polymer Science

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Nature Materials

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Polymer Bulletin

Soft Matter

Turkish Journal of Chemistry

**COURSES TAUGHT**

General Chemistry (for CHEM students) (UG, in Turkish, ITÜ, 2001-2002)

General Chemistry (UG, in English, ITU, IŞIK, DAÜ, 1990-

1992, 2000-2003)

Physical Chemistry (UG, in English, DAÜ, 1990-1992)

Physical Chemistry 1 and 2 (UG, in Turkish, KOÜ, 1995-1998)

Advanced Physical Chemistry 1 and 2 (G, in Turkish, KOÜ, 1995-1998)

Advances in Physical Chemistry (G, in English, İTÜ, 2000-2004)

Polymer Gels and Networks (G, in English, İTÜ, 2000-2004)

Chemical Kinetics (UG, in Turkish, İTÜ, 1998-1999)

Chemical Thermodynamics (UG, in Turkish, İTÜ, 1998- )

(UG, in English, İTÜ, 2011- )

Polymer Chemistry (UG, in Turkish, KOU, 1995-1998)

Physics and Chemistry of Polymers (G, in Turkish, KOU, 1995-1998)

Numerical Methods in Polymerization Kinetics (G, in Turkish, KOU, 1995-1998)

Computer Applications in Chemistry (UG, in Turkish, KOU, 1995-1998)

Computer Applications in Physical Chemistry (G, in English, DAÜ, 1990-1992)

Experimental Chemistry (UG, in English, DAÜ, 1990-1992) Smart Polymeric Materials (G, in English, İTÜ, 2014- )

(Note: DAÜ = Eastern Mediterranean Univ., North Cyprus, KOÜ = Kocaeli Univ., IŞIK = Isik Univ., İTÜ = Istanbul Technical Univ.)

**PAST AND PRESENT ADVISEES**

**MS Thesis**

1) Ufuk AKKAN, KOÜ, 1997 “Investigation of kinetically frozen structures in polyacrylamide gels” (in Turkish)

2) Nurgül K. BALIMTAŞ, KOÜ, 1997 “Relations between the synthesis conditions and the properties of polyacrylamide gels” (in Turkish)

3) Muzaffer KESKİNEL, KOÜ, 1997 “Study of the effect of cycle formation on the reaction kinetics of monovinyl-divinyl monomer copolymerization” (in Turkish)

4) Safiye Bozkurt SARIIŞIK, KOÜ, 1997 “Investigation of the swelling properties of anionic hydrogels based on acrylamide and 2-acrylamido-2-methylpropanesulfonic acid in water and in salt solutions” (in Turkish)

5) Erol ERBAY, KOÜ, 1997 “Effect of the diluent on the porous structure of macroporous styrene-divinylbenzene copolymer beads” (in Turkish)

6) Nermin GÜNDOĞAN, İTÜ, 2001 “Thermodynamic analysis of poly(N-isopropylacrylamide) network – linear polymer – solvent systems” (in English)

7) Vildan ÖZTÜRK, İTU, 2002 “Synthesis and characterization of temperature sensitive poly(N-tert-butylacrylamide-co-acrylamide) hydrogels” (in English)

8) M. Murat ÖZMEN, İTU, 2002 “Swelling properties and elastic behavior of temperature sensitive ionic poly(N-tert-butylacrylamide-co-acrylamide) hydrogels” (in English)

9) Handan CERİD, İTU, 2003 “Determination of inhomogeneities in polystyrene gels by using static light scattering techniques” (in English)

10) İlknur YAZICI, ITU, 2004 “Effect of synthesis conditions on spatial gel inhomogeneity in polyacrylic acid hydrogels” (in English)

11) Arzu OZDOGAN, ITU, 2004 “Effect of charge density on spatial inhomogeneity in poly(acrylamide) and poly(N-isopropylacrylamide) gels” (in English)

12) Yucel DOGU, ITU, 2004 "Synthesis and characterization of fast-responsive poly(N-isopropylacrylamide) gels” (in English)

13) Deniz CEYLAN ITU, 2008 "Superfast responsive, tough organogels based on butyl rubber” (in English)

14) Volkan CAN, ITU, 2008 "Synthesis and characterization of polyacrylamide-Laponite hydrogels” (in English)

15) Miray ÇİLİNGİR, ITU, 2009 "Effect of hydrophobic side groups on the degree of inhomogeneity in polyacrylamide gels” (in Turkish)

16) Saadet DOĞU, ITU, 2009 "Organogels based on butyl rubber: Effect of preparation conditions” (in English)

17) Ilknur KARAKUTUK, ITU, 2011 "Organogels based on butyl rubber, polybutadiene, and styrene-butadiebe rubber for oil spill removal” (in English)

18) Murat SARI, ITU, 2011 "Synthesis and characterization of tough hydrogels: Salt-induced micellar copolymerization of acrylamide and dococyl acrylate” (in English)

19) Pinar KARACAN, ITU, 2011 "Makrogözenekli DNA jellerinin sentezi ve sulardan kanserojen maddelerin uzaklaştırılmasında kullanımı” (in Turkish)

20) Melahat SAHIN, ITU, 2013 "Hidrofobik etkileşimlerle oluşan tersinir hidrojellerin ayrışması ve karakterizasyonu”

21) Gizem AKAY, ITU, 2013 "Katanyonik surfaktan çözeltilerinde sentezlenen kendini onarabilen hidrojeller”

22) Aslıhan ARĞUN, ITU, 2013 "Kendi kendini onarabilen hidrofobik modifiye poliakrilamid hidrojelinin mekanik özelliklerine bileşenlerinin etkisinin incelenmesi”

23) Hüsniye CAKMAK, ITU, 2013 "Fiziksel ve kimyasal çapraz bağlı DNA hidrojellerinin sentezi ve karakterizasyonu”

24) Fatih AK, ITU, 2013 "İpek fibroin kriyojellerinin sentezi ve mekanik özelliklerinin incelenmesi”

25) Zeynep ÖZTOPRAK, ITU, 2013 “Sentez sıcaklığı ve çapraz bağlayıcı konsantrasyonunun ipek fibroin kriyojellerinin özelliklerine etkisi”

26) Uğur ALTUN, ITU, 2013 “İyonik olmayan çift-ağyapılı poliakrilamid hidrojellerinin sentezi ve mekanik özellikleri”

27) Tuba BASKAN, ITU, 2013 “Sıcaklık ve pH’ya duyarlı poliakrilik asit / Pluronik içiçe-geçmiş ağyapıların sentezi ve karakterizasyonu”

28) Çiğdem BİLİCİ, ITU, 2014 “Miseller polimerizasyonu tekniği ile şekil hafızalı hidrojellerin sentezi ve karakterizasyonu”

29) Caner AKINCI, ITU, 2015 “Üstün mekanik özelliklere sahip ipek fibroin iskeletlerinin yüksek fibroin konsantrasyonlarında üretimi”

30) Berkant YETISKIN, ITU, 2015 “Mekanik olarak dayanıklı tek-, çift- ve üç-ağyapılı fibroin kriyojellerinin sentezi ve karakterizasyonu”

31) Damla D. DEMİR, ITU, 2016 “Kütle polimerizasyon ile şekil hafızalı, kendini onarabilen hidrofobik modifiye poliakrilik asit hidrojel sentezi ve karakterizasyonu“

32) Tuğba ÇELİKER, ITU, 2018 “İpek fibroin/polidimetilakrilamid esaslı yarı-içiçe geçmiş (semi-IPN) hidrojeller“

33) Sevil MUSLUMOVA, ITU, 2018 “Butil kauçuk esaslı kriyojellerin sentezi ve özelliklerinin incelenmesi“

34) Özge AKÇA, ITU, 2022 “ Shape-memory semicrystalline interconnected IPNs based on various commercial rubbers“

35) Yahya BAŞ, ITU, 2022 “Silk fibroin cryogel-based shape-memory organohydrogels“

36) Gamze DÖŞER, ITU, 2022 “ Effect of cryogenic conditions on the properties of synthetic and biological cryogels“

37) Çiğdem Buse ORAL, ITU, 2022 “Silk fibroin based smart organohydrogels“

38) Büşra SEKİZKARDEŞ, ITU, 2023 “ AMPS-based H-bonded superbasorbent hydrogels“

39) Gamze GERİM AYDIN, İTU, 2024. 4D Printing of body temperature responsive hydrogels with self-healing and shape-memory abilities.

**PhD Thesis**

1) Demet MELEKASLAN, ITU, 2004 "Investigation of the phase transition of gels based on acrylamide and N-isopropylacrylamide in polymer solutions" (in Turkish)

2) Selda DURMAZ, ITU, 2004 "Preparation of ionic polyacrylamide and polyisobutylene gels and determination of the gel properties” (in Turkish)

3) Mine Yener KIZILAY, ITU, 2006 “Investigation of spatial inhomogeneity in polyacrylamide gels by static light scattering” (in Turkish)

4) Nermin ORAKDOGEN, ITU, 2006 "Swelling, elasticity and inhomogeneity of poly(N,N-dimethylacrylamide) hydrogels" (in English)

5) Murat ÖZMEN, ITU, 2009 "Synthesis of macroporous hydrogels from frozen monomer solutions and their characterization" (in English)

6) Deniz CEYLAN TUNCABOYLU ITU, 2012 " Hydrophobic associations in gels: Hybrid organo-cryogels and hydrophobicallly modified hydrogels” (in English)

7) Umit GULYUZ, ITU, 2016 “"Synthesis and mechanical properties of self-healing smart hydrogels” (in English)

8) Ahmet T. UZUMCU, ITU, 2018 “"Synthesis, characterization and applications of biopolymer based hydrogels” (co-advisor, in English)

9) Aslıhan ARĞUN, ITU, 2018 "Design and biocompatible hydrogels with regions of

different chemical and mechanical Properties” (in English)

10) Çiğdem BİLİCİ, ITU, 2018 “Semi-crystalline hydrogels with shape-memory and self-healing functions” (in English)

11) Burak TAVŞANLI, ITU, 2021 “Mechanically strong hyaluronic acid-based hydrogels” (in English)

12) Berkant YETİŞKİN, ITU, 2021 “Mechanically strong hyaluronic acid-based hydrogels” (in English)

13) Esra SU, ITU, 2021 “Mechanically strong hyaluronic acid-based hydrogels” (in English)