

## Prof. Lokman TORUN

### Personal Information

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**Address:** Yıldız Teknik Üniversitesi Fen Edebiyat Fakültesi Kimya Bölümü, 34220 Esenler İstanbul

### International Researcher IDs

ORCID: 0000-0001-6848-1347

Yoksis Researcher ID: 33314

### Education Information

Doctorate, Purdue Üniversitesi, Fen Fakültesi, Kimya, Turkey Continues

Texas Tech Üniversitesi, Fen Fakültesi, Kimya, Turkey Continues

Ataturk University, Fen Edebiyat Fakültesi, Kimya, Turkey Continues

### Research Areas

Chemistry of Aromatic Compounds, Chemistry of Heterocyclic Compounds, Chemistry of Macromolecules, Natural Sciences

### Academic Titles / Tasks

Professor, Yildiz Technical University, Faculty Of Arts & Science, Department Of Chemistry, 2017 - Continues

### Courses

#### Doctorate

Supramolecular Chemistry, Doctorate, 2019 - 2020

#### Undergraduate

Organic Chemistry 2, Undergraduate, 2023 - 2024

Organic Chemistry 2, Undergraduate, 2020 - 2021

Organic Chemistry 1, Undergraduate, 2016 - 2017

Organic Chemistry 2, Undergraduate, 2015 - 2016

Organic Chemistry 1, Undergraduate, 2015 - 2016

General Chemistry, Undergraduate, 2013 - 2014

Organic Chemistry, Undergraduate, 2013 - 2014

### Supervised Theses

Torun L., Triazin esaslı yapılar: Yeni sıvı kristallerin sentezi, karakterizasyonu ve sıvı kristal özelliklerinin incelenmesi, Doctorate, N.AKKURT(Student), 2020

Torun L., Triazin içeren makromoleküllerin sentezi, karakterizasyonu, kaliks[3]arenin sentezi için yöntemlerin

araştırılması ve timokinon oksimin sentezi, Postgraduate, S.OKTOR(Student), 2020

Torun L., BAZI KİNOLİNON BİLEŞİKLERİNİN SENTEZİ, SİTOTOKSİK ÖZELLİKLERİNİN İNCELENMESİ VE TRIAZİN ESASLI BAZI MAKROMOLEKÜLER YAPILARIN SENTEZİ VE KARAKTERİZASYONU, Postgraduate, B.Genç(Student), 2019

Torun L., Triazine-based new macromolecules: Synthesis, characterization and properties, Doctorate, M.HADI(Student), 2019

Torun L., Triazine-Based New Plastifying Agents, Postgraduate, A.AL(Student), 2018

Torun L., Synthesis and Characterization of Novel Triptycene Type Photo-Crosslinkers, Postgraduate, Ş.Ateş(Student), 2009

## Published journal articles indexed by SCI, SSCI, and AHCI

- I. **New macromolecular structures based on benzene core, synthesis and characterization**  
Ali M. H., Torun L.  
INDIAN JOURNAL OF CHEMISTRY SECTION B-ORGANIC CHEMISTRY INCLUDING MEDICINAL CHEMISTRY, vol.60, no.3, pp.465-472, 2021 (SCI-Expanded)
- II. **Claisen type Condensation of Methyl Ketones with Carbimidothioates: A New Gateway for the Synthesis of beta-Enaminones**  
Swaroop T. R., Rangappa K. S., TORUN L.  
CHEMISTRYSELECT, vol.6, no.2, pp.177-180, 2021 (SCI-Expanded)
- III. **Synthesis and liquid crystalline properties of new triazine-based pi-conjugated macromolecules with chiral side groups**  
Akkurt N., Al-Jumaili M. H. A., Ocak H., Çakar F., Torun L.  
TURKISH JOURNAL OF CHEMISTRY, vol.44, pp.726-746, 2020 (SCI-Expanded)
- IV. **Silica-supported heterogeneous catalysts-mediated synthesis of chalcones as potent urease inhibitors: in vitro and molecular docking studies**  
Sultan A., Shajahan S., Ahamad T., Alshehri S. M., Sajjad N., Mehr-un-Nisa M., Rehman M. H. U., Torun L., Khalid M., Acevedo R.  
MONATSHFESTE FÜR CHEMIE, vol.151, no.1, pp.123-133, 2020 (SCI-Expanded)
- V. **Acetylene-bridged triazine pi-conjugated structures: synthesis and liquid crystalline properties**  
Akkurt N., Al-Jumaili M. H. A., Bilgin Eran B., Ocak H., Torun L.  
TURKISH JOURNAL OF CHEMISTRY, vol.43, no.5, pp.1436-1444, 2019 (SCI-Expanded)
- VI. **Synthesis and thermal properties of difunctional polysulfone telechelics**  
TORUN L.  
POLYMER BULLETIN, vol.74, no.10, pp.3923-3938, 2017 (SCI-Expanded)
- VII. **Synthesis and structure-activity relationship studies of 3-biaryl-8-oxabicyclo[3.2.1]octane-2-carboxylic acid methyl esters**  
Torun L., Madras B. K., Meltzer P. C.  
BIOORGANIC & MEDICINAL CHEMISTRY, vol.20, no.8, pp.2762-2772, 2012 (SCI-Expanded)
- VIII. **Polysulfone/Clay Nanocomposites by in situ Photoinduced Crosslinking Polymerization**  
Dizman C., Ates S., Uyar T., Tasdelen M. A., Torun L., Yağcı Y.  
MACROMOLECULAR MATERIALS AND ENGINEERING, vol.296, no.12, pp.1101-1106, 2011 (SCI-Expanded)
- IX. **Photochemically prepared polysulfone/poly(ethylene glycol) amphiphilic networks and their biomolecule adsorption properties**  
Dizman C., Demirkol D. O., Ates S., Torun L., Sakarya S., TİMUR S., Yağcı Y.  
COLLOIDS AND SURFACES B-BIOINTERFACES, vol.88, no.1, pp.265-270, 2011 (SCI-Expanded)
- X. **Polysulfone/Metal Nanocomposites by Simultaneous Photoinduced Crosslinking and Redox Reaction**  
Sangermano M., Roppolo I., Camara V. H. A., Dizman C., Ates S., Torun L., Yağcı Y.  
MACROMOLECULAR MATERIALS AND ENGINEERING, vol.296, no.9, pp.820-825, 2011 (SCI-Expanded)
- XI. **Polysulfone/Pyrene Membranes: A New Microwell Assay Platform for Bioapplications**  
Karadag M., Yilmaz G., Toiserkani H., Demirkol D. O., Sakarya S., Torun L., TİMUR S., Yağcı Y.

MACROMOLECULAR BIOSCIENCE, vol.11, no.9, pp.1235-1243, 2011 (SCI-Expanded)

- XII. **Polysulfone based amphiphilic graft copolymers by click chemistry as bioinert membranes**  
Yilmaz G., Toiserkani H., Demirkol D. O., Sakarya S., TİMUR S., Torun L., Yağcı Y.  
MATERIALS SCIENCE & ENGINEERING C-MATERIALS FOR BIOLOGICAL APPLICATIONS, vol.31, no.5, pp.1091-1097, 2011 (SCI-Expanded)
- XIII. **Synthesis, characterization and thermally activated curing of polysulfones with benzoxazine end groups**  
Ates S., Dizman C., Aydogan B., Kiskan B., Torun L., Yağcı Y.  
POLYMER, vol.52, no.7, pp.1504-1509, 2011 (SCI-Expanded)
- XIV. **Modification of Polysulfones by Click Chemistry: Amphiphilic Graft Copolymers and Their Protein Adsorption and Cell Adhesion Properties**  
Yilmaz G., Toiserkani H., Demirkol D. O., Sakarya S., TİMUR S., Yağcı Y., Torun L.  
JOURNAL OF POLYMER SCIENCE PART A-POLYMER CHEMISTRY, vol.49, no.1, pp.110-117, 2011 (SCI-Expanded)
- XV. **Functionalization of Polysulfones by Click Chemistry**  
Toiserkani H., Yilmaz G., Yağcı Y., Torun L.  
MACROMOLECULAR CHEMISTRY AND PHYSICS, vol.211, no.22, pp.2389-2395, 2010 (SCI-Expanded)
- XVI. **Utilization of Stille cross coupling protocol for the synthesis of series of biaryl-8-oxabicyclo[3.2.1]octane-2-carboxylic acid methyl**  
Torun L., Meltzer P. C.  
ABSTRACTS OF PAPERS OF THE AMERICAN CHEMICAL SOCIETY, vol.240, 2010 (SCI-Expanded)
- XVII. **Synthesis, structure and metal ion binding of di-(1,8-naphtho)-16-crown-4 compounds**  
Torun L., Mueller P., Cao X., Bartschb R. A.  
Arkivoc, vol.2010, no.7, pp.138-145, 2010 (SCI-Expanded)
- XVIII. **Synthesis, characterization and photoinduced curing of polysulfones with (meth)acrylate functionalities**  
Dizman C., Ates S., Torun L., Yagci Y.  
BEILSTEIN JOURNAL OF ORGANIC CHEMISTRY, vol.6, 2010 (SCI-Expanded)
- XIX. **Synthesis and characterization of triptycene type cross-linker and its use in photoinduced curing applications**  
Ates S., Aydogan B., Torun L., Yağcı Y.  
POLYMER, vol.51, no.4, pp.825-831, 2010 (SCI-Expanded)
- XX. **Synthesis and Characterization of Polystyrene Possessing Triptycene Units in the Main Chain by Combination of ATRP and Click Chemistry Processes**  
Ates S., Durmaz Y. Y., Torun L., Yağcı Y.  
JOURNAL OF MACROMOLECULAR SCIENCE PART A-PURE AND APPLIED CHEMISTRY, vol.47, no.8, pp.809-815, 2010 (SCI-Expanded)
- XXI. **The structure activity relationship studies of 3-(biaryl)-8-oxabicyclo[3.2.1]octane-2-carboxylic acid methyl esters**  
Torun L., Meltzer P.  
ABSTRACTS OF PAPERS OF THE AMERICAN CHEMICAL SOCIETY, vol.237, 2009 (SCI-Expanded)
- XXII. **Enhancement to the rate-dependent mechanical behavior of polycarbonate by incorporation of triptycenes**  
Tsui N. T., Yang Y., Mulliken A. D., Torun L., Boyce M. C., Swager T. M., Thomas E. L.  
POLYMER, vol.49, no.21, pp.4703-4712, 2008 (SCI-Expanded)
- XXIII. **Molecular barbed wire: Threading and interlocking for the mechanical reinforcement of polymers**  
Tsui N. T., Torun L., Pate B. D., Paraskos A. J., Swager T. M., Thomas E. L.  
ADVANCED FUNCTIONAL MATERIALS, vol.17, no.10, pp.1595-1602, 2007 (SCI-Expanded)
- XXIV. **Minimization of internal molecular free volume: A mechanism for the simultaneous enhancement of polymer stiffness, strength, and ductility**  
Tsui N., Paraskos A., Torun L., Swager T., Thomas E.  
MACROMOLECULES, vol.39, no.9, pp.3350-3358, 2006 (SCI-Expanded)

- XXV. **Synthesis of 3-(4-heteroaryl-phenyl)-8-oxabicyclo[3.2.1]octane-2-carboxylic acid methyl esters**  
Torun L., Liu S., Madras B. K., Meltzer P. C.  
TETRAHEDRON LETTERS, vol.47, no.4, pp.599-603, 2006 (SCI-Expanded)
- XXVI. **Side arm participation in lariat ether carboxylate-alkali metal cation complexes in solution**  
Torun L., Robison T. W., Krzykawski J., Purkiss D. W., Bartsch R. A.  
TETRAHEDRON, vol.61, no.35, pp.8345-8350, 2005 (SCI-Expanded)
- XXVII. **Intramolecular sensitization within steroids: Excited-state interaction of C-17 alpha and beta carbon-bromine bonds with a C-6 carbonyl group**  
Li W., Torun L., Morrison H.  
CANADIAN JOURNAL OF CHEMISTRY, vol.81, no.6, pp.660-668, 2003 (SCI-Expanded)
- XXVIII. **Photooxidation of 2'-deoxyguanosine 5'-monophosphate in aqueous solution**  
Torun L., Morrison H.  
PHOTOCHEMISTRY AND PHOTOBIOLOGY, vol.77, no.4, pp.370-375, 2003 (SCI-Expanded)
- XXIX. **Cycloaddition reactions of sodium dinitroxytrioxide (Angeli's salt)**  
Torun L., Mohammad T., Morrison H.  
Tetrahedron Letters, vol.40, no.29, pp.5279-5282, 1999 (SCI-Expanded)

### Articles Published in Other Journals

- I. **Six-Armed Structures Based on Benzene Ring, Synthesis and Characterization via Sonogashira Coupling**  
Al-Jumaili M. H. A., Hamed A. S., Akkurt N., TORUN L.  
INDONESIAN JOURNAL OF CHEMISTRY, vol.20, no.3, pp.705-715, 2020 (ESCI)

### Papers Published in Refereed Scientific Meetings

- I. **SYNTHESIS, PURIFICATION AND CHARACTERIZATION OF QUINOLONECHALCONE HYBRID DERIVATIVES AND THEIR BIOACTIVITY STUDIES**  
TORUN L., BAKYYEV R.  
III. ULUSLARARASI BİLİM VE İNOVASYON KONGRESİ, Turkey, 09 June 2022
- II. **Synthesis, structure and metal ion binding of di-(1,8-naphtho)-16-crown-4 compounds**  
TORUN L., Mueller P., Cao X., Bartsch R. A.  
ACS, Mart 2012
- III. **Synthesis and Thermal Properties of Poly(aryl ether sulfones) Macromonomers**  
TORUN L.  
ACS, August 2012
- IV. **New Aryl Substituted Oxatropenes: Synthesis and Biological Profiles.**  
TORUN L.  
44th IUPAC World Chemistry Congress, 8-15 Ağustos 2013,
- V. **Threading and Interlocking: A Mechanism for the Simultaneous Enhancement of Polymer Stiffness, Strength, and Ductility,**  
TORUN L.  
NanoTR III, 11-14 June 2007,
- VI. **Incorporation of Triptycene Units into Polymers: A Versatile Route to Improve Mechanical and Thermal Properties.**  
TORUN L.  
Baekland 2009 2nd International Symposium on Thermosets. 22-25 November 2009
- VII. **Modification of Polysulfones by Click Chemistry: Amphiphilic Graft Copolymers and Their Protein Adsorption and Cell Adhesion Properties**

- TORUN L., Yilmaz G., Toiserkani H., Odaci D., Sakarya S., Timur S., Yagci Y.  
European Polymer Congress, 25 June 01 July 2011,
- VIII. **Lineer ve Çapraz Bağlı Polimerlere Triptisin Ünitesinin Bağlanması İçin Yeni Yöntemler**  
TORUN L., Ates S., Aydoğan B., Durmaz Y. Y., Yagci Y.  
24th National Chemistry Symposium, 29 June-2 July 2010,
- IX. **Yeni Okzatropenler: Sentezlenmeleri ve Biyolojik Özellikleri,**  
TORUN L.  
2. İlaç Kimyası, Üretimi, Teknolojisi ve Standardizasyonu Kongresi, 21-23 Mart 2014.
- X. **Yeni Kokain Antigonislerinin Sentezi ve Yapı Aktivite İlişkilerinin İncelenmesi.**  
TORUN L.  
24th National Chemistry Symposium, 29 June-2 July 2010, .
- XI. **Polysulfone/Clay Nanocomposites by in situ Photoinduced Crosslinking Polymerization**  
Dizman C., Ates S., Uyar T., Taşdelen M. A., TORUN L., Yagci Y.  
APME 2011 - IUPAC 9th International Conference on Advanced Polymers via Macromolecular Engineering, 05-08 September 2011,
- XII. **Meth(akrilat) Fonksiyonlu Polisüfonların Sentezi, Karakterizasyonu ve Işık ile Kürleşmesi**  
Dizman C., Ates S., TORUN L., Yagci Y.  
24th National Chemistry Symposium, 29 June-2 July 2010,
- XIII. **Functional Polysulfones: Synthesis, Characterization and Properties of New Poly(aryl ether sulfones),**  
TORUN L., Yagci Y.  
ACS, August 2012
- XIV. **Synthesis and Characterization of Triptycene Type Cross-linker and Its Use in Photoinduced Curing Applications**  
Ates S., Aydoğan B., TORUN L., Yagci Y.  
Baekeland 2009 2nd International Symposium on Thermosets. 22-25 November 2009,
- XV. **Laser-Induced Surface Modification of Organic Polymers,**  
TORUN L.  
Advanced Laser Technologies, 26 September-1 October 2009,
- XVI. **Benzoksazin fonksiyonlu Polisülfonlar**  
Ates S., Dizman C., TORUN L., Yagci Y.  
24th National Chemistry Symposium, 29 June-2 July 2010,
- XVII. **Synthesis and structure activity relationship studies of 3-(biaryl)-8-oxabicyclo[3.2.1]octane-2-carboxylic acid methyl esters.**  
TORUN L., Peter M.  
Abstracts of Papers, 239th ACS National Meeting, 21-25 March 2010
- XVIII. **Synthesis and Characterization of Polymers With Triptycene Units By Photopolymerization and Polystyrene Possessing Triptycene Unit In The Main Chain By Combination of ATRP and Click Chemistry Processes**  
TORUN L., Ates S., Aydoğan B., Yagci Y.  
NanoTR IV, 15-18 June 2010 ,

## Other Publications

- I. **Studies in Organic and Bioorganic Photochemistry**  
TORUN L.  
Other, 2001
- II. **New Crown Ether Compounds and Their Alkali Metal Ion Complexation**  
TORUN L.  
Other, 1994

### III. Nafto[b]siklopropanın Sentezi ve Reaktivitesi

TORUN L.

Other, 1986

### Supported Projects

TORUN L., Kotan H., DANIŞMAN KALINDEMİR TAŞ F., KURUCA ERDEM S., Project Supported by Higher Education Institutions, Yeni Fenilkinolinon Bileşiklerinin Sentezi ve İnsan Kanseri Hücre Hatlarında Sitotoksik Etkilerinin Araştırılması ve Triazin Esaslı Çok Kollu Yapıların Sentezi Ve Özelliklerinin İncelenmesi, 2021 - 2023

TORUN L., BAKYYEV R., Project Supported by Higher Education Institutions, Synthesis, Purification, Characterization and Bioactivity Evaluation of some Quinolone-Chalcone Hybrid Derivatives, 2021 - 2023

TORUN L., Kotan H., Project Supported by Higher Education Institutions, Yeni Fenil Kinolinonların Sentezi Saflaştırılması Karakterize Edilmesi ve Sitotoksik Özelliklerinin İncelenmesi, 2021 - 2022

TORUN L., KURUCA D. S., DANIŞMAN KALINDEMİR TAŞ F., Kotan H., Project Supported by Higher Education Institutions, beta-Enaminonların sentezi için yeni bir metod, 2020 - 2021

TORUN L., AKKURT N., Project Supported by Higher Education Institutions, Triazin Esaslı Yapılar: Yeni Sıvı Kristallerin Sentezi, Karakterizasyonu ve Sıvı Kristal Özelliklerinin İncelenmesi, 2015 - 2020

TORUN L., OCAK H., ÇAKMAKCI M., Project Supported by Higher Education Institutions, Yeni Polieter-Sülfon Membran Malzemelerinin Geliştirilmesi ve Su Geçirgenlik Performanslarının Araştırılması, 2016 - 2018

TORUN L., BİLGİN ERAN B., TÜBİTAK Project, Triazin Esaslı Yeni Sıvı Kristaller: Sentezi, Karakterizasyonu ve Sıvı Kristal Özelliklerinin Araştırılması, 2015 - 2017

TORUN L., Other International Funding Programs, Triazin Makromoleküllerin Sentezi, Karakterizasyonu ve Fiziksel Özelliklerinin İncelenmesi, 2014 - 2017

TORUN L., TÜBİTAK Project, Polisülfonların Üretilmesi ve Uygulamaları, Continues

TORUN L., Project Supported by Other Official Institutions, İleri Teknoloji Tesisat Malzemelerinin Geliştirilmesi ve Uygulamaları, Continues

TORUN L., Other International Funding Programs, Enerji Absorblama ve Darbe dayanımı artırılmış Polimerik Malzemeler, Continues

TORUN L., Other International Funding Programs, Synthesis and Structure Activity Relationship Studies of 3-Biaryl-8-oxabicyclo[3.2.1]octane-2-carboxylic Acid Methyl Esters, Continues

### Tasks In Event Organizations

Saraç Özkan A., San N., Şakar Daşdan D., Akyol E., Altıkatoğlu Yapaöz M., Uğraşkan V., Bilgi M., Işık B., Cankurtaran Ö., Derman S., et al., 31. Ulusal Kimya Kongresi, Scientific Congress, İstanbul, Turkey, Eylül 2019

### Metrics

Publication: 52

Citation (WoS): 543

Citation (Scopus): 566

H-Index (WoS): 13

H-Index (Scopus): 14

### Non Academic Experience

TÜBİTAK MAM KİMYA ENSTİTÜSÜ, Enstitü Müdür Yardımcısı V.

TÜBİTAK MAM Kimya Enstitüsü, Uzman Araştırmacı

TÜBİTAK MAM Malzeme Enstitüsü, Uzman Araştırmacı  
MIT, USA, Postdoktor  
Organix Inc., Postdoktor  
Purdue University, USA, Teaching/Research Asistant  
Texas Tech University, USA, Teaching/Research Asistant  
Yüzüncü Yıl Üniversitesi, Arş. Gör  
ATATÜRK Üniversitesi, Uzman