

CURRICULUM VITAE

Mehmet TANOL. Ph.D.

EDUCATION:

Department of Pharmaceutical Chemistry, Faculty of Pharmacy, Ege University, Izmir, Turkey, Ph.D., 1983.

Faculty of Pharmacy, University of Istanbul, Istanbul, Turkey, B.Pharm., 1973

ACADEMIC APPOINTMENTS:

Full Professor of Pharmaceutical Chemistry, Faculty of Pharmacy, Istanbul Kemerburgaz University, Istanbul, Turkey, April 2012 to present.

Full Professor of Pharmaceutical Chemistry, Faculty of Pharmacy, Ege University, Izmir, Turkey, April 1999 to August 1999.

Associate Professor of Pharmaceutical Chemistry, Faculty of Pharmacy, Ege University, Izmir, Turkey, October 1992 to April 1999.

Assistant Professor of Pharmaceutical Chemistry, Faculty of Pharmacy, Ege University, Izmir, Turkey, February 1987 to October 1992.

Research Assistant, Faculty of Pharmacy, Ege University, Izmir, Turkey, January 1979 to February 1987.

Teaching Assistant, Faculty of Pharmacy, Ege University, Izmir, Turkey, October 1973 to January 1979.

SABBATICAL LEAVES:

Research Associate, Biotechnology Innovation & Optimization Center, University of Kansas, 2009 to 2012

Research Associate, Center for Drug Delivery Research, University of Kansas, (Dr. R. Rajewski), December 1999 to 2009

Post doc., Department of Pharmaceutical Chemistry, University of Kansas, (Dr. J.H. Rytting), December 1996 to 1999

Post doc., Department of Medicinal Chemistry, University of Kansas, (Dr. J. Aube'), September 1988 to September 1990.

PROFESSIONAL EXPERIENCES:

Pharmacist, registered; July 1972, Bergama, Izmir, Turkey

Pharmacist, registered; July 1971, Bergama, Izmir, Turkey

PROFESSIONAL MEMBERSHIPS:

American Chemical Society (February 2002 to present)

American Association of Pharmaceutical Scientists (June 1997 to present)

Organization of Ege University Faculty of Pharmacy Graduates and Affiliates (1996 to present)

Evaluation Committee for Research Awards granted by Toprak Ilac; A prominent drug company located in Istanbul, Turkey (1996 to 1997)

Organization of Pharmaceutical and Medicinal Chemistry, Ankara, Turkey (1995 to present)

Turkish Association of Pharmacists (June 1973 to present)

ADMINISTRATIVE ACTIVITIES:

Associate Professor Representative in the Faculty Council (March 1996 to January 1997)

TEACHING:

Undergraduate Level: (Faculty of Pharmacy, Ege University, Izmir, Turkey)

Organic Chemistry (2 credit hours) offered to 2nd year pharmacy students.

Medicinal Chemistry I / II (4 credit hours) offered to 3rd year pharmacy students.

Medicinal Chemistry III / IV (4 credit hours) offered to 4th year pharmacy students.
Pharmaceutical Chemistry Practicum I / II offered to 3rd year pharmacy students.
Pharmaceutical Chemistry Practicum III / IV offered to 4th year pharmacy students.

Graduate Level: (Faculty of Pharmacy, Ege University, Izmir, Turkey)

Stereochemistry (2 credit hours) offered in the M.S. program
Advanced Organic Chemistry (4 credit hours) offered in the Ph.D. program
QSAR of Drugs (2 credit hours) offered in the Ph.D. program

RESEARCH INTERESTS:

Synthesis of Prodrugs (POM , Cyclic Peptides).

Total synthesis of potentially active heterocycles: more recent interest on stereoselective total synthesis of natural products with pharmacological activity.

Synthesis of new biodegradable transdermal penetration enhancers.

Studies on physicochemical properties of synthesized compounds, leading to SAR and QSAR studies.

The preparation of the new enhancers and prodrugs for targeted drug delivery systems.

Structure elucidation of unknown compounds using spectrometric and instrumental methods (HPLC, UV, 1H-NMR, 13C-NMR, IR, MS, LCMS).

Activity tests and assays on synthesized compounds (local anesthetic and antispasmodic activity tests).

TECHNICAL SKILLS:

Operation of:

1H- and 13C-NMR (Bruker WP60, Bruker WP90, Varian 300LX).

IR (Perkin Elmer 577, Perkin Elmer 1420).

UV (Carl Zeiss PMQ, Perkin Elmer Lambda 5) Spectrometers.

LCMS (Shimadzu 2010)

Coulometer 652-KF

HPLC (Perkin Elmer, Waters).

MPLC.

Polarimeter (Perkin Elmer 241 MC).

Chromatotron (7924 T Harrison Research).

Animal Handling (Local anesthetic activity tests on the skins of guinea pigs and antispasmodic activity tests on ileum of rats).

Principles of Radiation Safety.

Macintosh and IBM PC computers.

PERSONAL:

U.S. and Turkish citizen, married, two children. Born in Bergama (August 22, 1949), Izmir, Turkey.

Auxiliary Activities: Reading, Hunting, Sailing, Swimming, Soccer.

PUBLICATIONS:

1. **M. Tanol**, "Studies On the Synthesis and structure-activity Relationship of Some *p*-Acylaminophenylmorpholinoalkyl Ethers with Potential Local Anesthetic Activity", Ph.D. Thesis, Izmir, (1983).
2. **M. Tanol**, "Studies On Some *p*-Acylaminophenylmorpholinoalkyl Ethers", *Gazi Ecz. Fak. Der.* **3**(1), 81 (1986).
3. J. Aube', Y. Wand, M. Hammond, **M. Tanol**, F. Takusagawa and D. V. Velde, "Synthetic Aspects of an Asymmetric Nitrogen Insertion Process: Preparation of Chiral, Non-Racemic Caprolactams and Valerolactams. Total Synthesis of (-)-Alloyohimbane", *J. Am. Chem. Soc.*, **112**, 4879 (1990).
4. U. Ucucu, I. Isikdag and **M. Tanol**, "Antihelminthic Activity and QSARs of Some 2-Alkyl-5-chlorobenzimidazole Derivates", *Gazi Ecz. Fak. Der.*, **9**(1) (1992).
5. P. Ozic, **M. Tanol**, M. Cizmecioglu, V. Pabuccuoglu and B. Gozler, "Synthesis of Some Potentially Active 1-Substitutedaryl-1,2,3,4-tetrahydroisoquinolines via 3,4-Dihydro Analogs", *Doga TU J.Pharm.*, **2**(2), 81 (1994).
6. J. Aube', S. Ghosh, and **M. Tanol**, "Symmetry-Driven Synthesis of Indole Alkaloids: Asymmetric Total Synthesis of (+)-Yohimbine, (-)-Yohimbone, (-)-Yohimbane, and (+)-Alloyohimbane", *J. Am. Chem. Soc.*, **116**, 9009 (1994).
7. S. Ghosh, **M. Tanol** and J. Aube', "A Novel Route to the Alkaloids of the Yohimbine Family"; presented at the 28th Annual Medicinal Chemistry Meeting-In-Miniature (MIKI), held in the University of Illinois at Chicago, U.S.A. in May 3-5, (1990).

8. S. Dickey, M. Hammond, **M. Tanol** and J. Aube', "Asymmetric Synthesis of Chiral Glyceral Equivalents", presented within the Seminar Program of the University of Kansas, School of Pharmacy, Department of Medicinal Chemistry U.S.A. in September (1990).
9. T. Buyuktimkin, **M. Tanol**, S. Buyuktimkin, N. Buyuktimkin, J. L. Yeager and J. H. Rytting, " Permeation and Dissapperarance Studies with two Biodegradable Penetration Enhancers, Dodecyl 2-(N,N-Dimethylamino)-Propionate(DDAIP) and 2-(N,N-Dimethylamino)-Propanol Tetradecanoate(DAIPM) in Shed Snake Skin", presented at the 12th Annual AAPS Meeting, Abstract 2240.*Pharm. Res.* **14**: S 301, (1997).
10. **M. Tanol**, S. Buyuktimkin, N. Buyuktimkin, J. L. Walters, J. L. Yeager and J. H. Rytting, "Comparison of Model Membranes for Transdermal Studies: Part I. Transport Study" presented at the 12th Annual AAPS Meeting, Abstract 2295.*Pharm. Res.* **14**: S 316, (1997).
11. **M. Tanol**, S. Buyuktimkin, N. Buyuktimkin, J. L. Walters, A. E. Cohen, J. L. Yeager and J. H. Rytting, "Comparison of Model Membranes for Transdermal Studies: Part II. Total Lipid Content and Composition" presented at the 12th Annual AAPS Meeting, Abstract 2296.*Pharm. Res.* **14**: S 316, (1997).
12. S. Buyuktimkin, N. Buyuktimkin, N. Ersoy, **M. Tanol**, J. L. Walters, A. R. Cohen, and J. H. Rytting, " Influence of Storage Conditions of The Shed Snake Skin of Three Species On Their Lipid Composition, Transdermal Delivery and Retention of Diphenhydramine, Hydrocortisone, and Ketoprofen" presented at the 13th Annual AAPS Meeting, Abstract 3603.*Pharm. Sci.* V:1, No:1, (1998).
13. B. Gozler, E. Erciyas, V. Pabuccuoglu, S. Gunes, **M. Tanol**, "Pharmaceutical Chemistry III-IV Lecture Notes", Izmir, (1992).
14. **M. Tanol**, M.P. McIntosh, T. Siahaan, R.A. Rajewski. "Solvent Effects on The Synthesis of N^a-(Benzyloxycarbonyl)-N^c-(Chloromethyloxycarbonyl)-L-Lysine amide" presented at the 224th ACS National Meeting, Boston, MA, August 18-22, 2002 in Boston.
15. M.P. McIntosh, **M. Tanol**, N. Schwarting, D.M. Pinson, S.C. Fowler and R.A. Rajewski. "Targeted Methotrexate Delivery to activated T-cells via LFA-1 Receptors in Relapsing and Remitting Experimental Autoimmune Encephalomyelitis Reduces relapse severity" presented at the American Association of Pharmaceutical Scientists, National Biotechnology Conference, San Francisco, 2005.

16. A. N. Lucas, **M. Tanol**, M. P. McIntosh and R. A. Rajewski, Preparation and purification of desethylamiodarone hydrochloride, *Synthetic Communications*, Vol. 36, Number 22, pp. 3371-3376 (2006).
17. Shelton Shary N; Shawgo Mary E; Matthews Shawna B; Lu Yuanming; Donnelly Alison C; Szabla Kristen; **Tanol Mehmet**; Vielhauer George A; Rajewski Roger A; Matts Robert L; Blagg Brian S J; Robertson John D. **KU135, a novel novobiocin-derived C-terminal inhibitor of the 90-kDa heat shock protein, exerts potent antiproliferative effects in human leukemic cells.** *Molecular pharmacology* 2009;76(6):1314-22.
18. Patent application title: PRODRUGS OF (3,5-BIS(4-FLUOROPHENYL)TETRAHYDRO-1H-OXAZOLO[3,4-C]OXAZOL-7A-YL)METHANOL AND DERIVATIVES THEREOF
- Inventors: Roger A. Rajewski Michelle P. McIntosh Ingrid Gunda Georg **Mehmet Tanol** Agents: Workman Nydegger;1000 Eagle Gate Tower
Assignees: Origin: SALT LAKE CITY, UT US IPC8 Class: AA61K314188FI USPC Class: 514393 Patent application number: 20100056592Read more:
<http://www.faqs.org/patents/app/20100056592#ixzz1BW2cjze2>
19. Patent application title : 2-METHOXYESTRADIOL (2-ME₂) PRODRUG WITH ENHANCED BIOAVAILABILITY FOR PROPHYLAXIS OR TREATMENT OF CANCEROUS OR NON-CANCEROUS CONDITION
- Inventors: Suman Kambhampati, Roger A. Rajewski, Sushanta K. Banerjee, **Mehmet Tanol** Agents: Dinesh Agarwal, P.C. 5350 Shawnee Road, Suite 330 Alexandria, VA,22312 U.S.A Docket Number: US 1547/10(Prov.)
20. Patent application title : PRODRUGS OF 6-CYCLOHEXYL-1-HYDROXY-4-METHYLPYRIDIN-2-(1H)-ONE AND DERIVATIVES THEREOF
- Inventors: **Mehmet Tanol**, Scott J. Weir. Agents : Workman Nydegger, 1000 Eagle Gate Tower ,Salt Lake City, UT US. Application Number: 61419218, Attorney Docket Number: 16994.86

21. Patent application title: DECOQUINATE PRODRUGS AND METHODS OF SYNTHESIS AND TREATMENT

Inventors: Stefano Pogany, **Mehmet Tanol**, Michael Baltezor Agents: Maschoff Gilmore & Israelsen 1441 W. Utc Blvd., Suite 100 Park City, Utah 84098-763 US. Docket No: 10007US01

22. K. Kucukoglu , **M. Tanol** “Synthesis of Some Pramoxine-Based Compounds as Possible Local Anesthetic and Anticholinergic Agents”, *Asian Journal of Chemistry*, Vol. 22, No.5 (2010), 3404-3412.

23. Suman Kambhampati, Roger A. Rajewski, **Mehmet Tanol**, Inamul Haque, Amlan Das, Snigdha Banerjee, Saheli Jha, Douglas Burns, Emma Borrego-Diaz Reyes, Peter J. Van Veldhuizen, and Sushanta K. Banerjee. **A Second-Generation 2-Methoxyestradiol Prodrug is Effective against Barrett's Adenocarcinoma in a Mouse Xenograft Model.** *Mol. Cancer Ther.* March 2013 12:3 255–263;