

## Prof. URAL AKBULUT

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### Advising Theses

TOPPARE L. K., AKBULUT U., Immobilization of saccharomyces cerevisiae in graft copolymers of pyrrole, Postgraduate, Z.BALCI(Student), 2001

AKBULUT U., Electrochemically prepared conducting polymer grafts of pyrrole, Doctorate, N.BALCI(Student), 1997

AKBULUT U., Electrochemically prepared conducting polymer grafts of pyrrole, Doctorate, N.Balci(Student), 1997

AKBULUT U., Conducting polymer blends of polythiophene, Doctorate, S.Yiğit(Student), 1996

TOPPARE L. K., AKBULUT U., Electrochemically obtained insulating and conducting polymers and composites of acrylonitrile, Doctorate, B.YURTTAŞ(Student), 1996

AKBULUT U., Conduction polymer blends of polythiophene, Doctorate, S.YİĞİT(Student), 1996

TOPPARE L. K., AKBULUT U., Synthesis of polythiophene conducting polymer composites, Postgraduate, F.VATANSEVER(Student), 1995

AKBULUT U., Immobilization of invertase and a-amylase using different support systems by chemical crosslinking, Postgraduate, E.Emregül(Aysu)(Student), 1993

AKBULUT U., Immobilization of invertase and alpha-amilase using different support systems, Postgraduate, E.(AYSU)(Student), 1993

AKBULUT U., Isolation and immobilization of NADH-cytochrome b5 reductase from rabbit liver, Postgraduate, Ö.ESEN(Student), 1992

AKBULUT U., Conductivity and kinetic studies in the electroinitiated polymerization of N-vinylcarbazole, Postgraduate, H.ELİBOL(Student), 1991

AKBULUT U., Electrochemical synthesis of conducting polyaniline blends and their use as sensors, Postgraduate, S.DOĞAN(Student), 1991

AKBULUT U., Immobilization of alfa-amylase into photographic gelatin by chemical cross-linking, Postgraduate, Z.BAYRAMOĞLU(Student), 1990

AKBULUT U., Immobilization of a-amylase into photographic gelatin by chemical cross-linking, Postgraduate, Z.Bayramoğlu(Student), 1990

AKBULUT U., Electroinitiated polymerization of butadiene sulfone, Postgraduate, S.PINAR(Student), 1989

AKBULUT U., Electroinitiated copolymerization of indene with isoprene and b-methoxystyrene, Doctorate, A.Khurshid(Student), 1988

AKBULUT U., Electroinitiated copolymerization of indene with isoprene and B-methoxystyrere, Doctorate, K.ALİ(Student), 1988

AKBULUT U., Electroinitated cationic homo and copolymerization of indene, styrene and some styrene derivations, Doctorate, S.Eren(Student), 1984

AKBULUT U., The cathodic cleavage of aryl tetrazole ethers., Doctorate, L.K(Student), 1982

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

1. **Multi-authoring and its impact on university rankings: a case study of CERN effect on Turkish universities**

ÇAKIR M. P., ACARTÜRK C., Alkan S., Akbulut U.

STUDIES IN HIGHER EDUCATION, vol.44, no.6, pp.1052-1068, 2019 (SSCI)

- II. **URAP-TR: a national ranking for Turkish universities based on academic performance**  
Alasehir O., ÇAKIR M. P., ACARTÜRK C., BAYKAL N., AKBULUT U.  
SCIENTOMETRICS, vol.101, no.1, pp.159-178, 2014 (SCI-Expanded)
- III. **The conductive polyaniline/poly(ethylene terephthalate) composite fabrics**  
Kutunis S., Karakisla M., Akbulut U., Sacak M.  
COMPOSITES PART A-APPLIED SCIENCE AND MANUFACTURING, vol.38, no.2, pp.609-614, 2007 (SCI-Expanded)
- IV. **Polyacrylamide-gelatine carrier system used for invertase immobilization**  
Emregul E., Sungur S., Akbulut U.  
FOOD CHEMISTRY, vol.97, no.4, pp.591-597, 2006 (SCI-Expanded)
- V. **Immobilization of glucose oxidase onto gelatin for biosensor construction**  
Emregul E., Sungur S., Akbulut U.  
JOURNAL OF BIOMATERIALS SCIENCE-POLYMER EDITION, vol.16, no.4, pp.505-519, 2005 (SCI-Expanded)
- VI. **Immobilization of yeast cells in several conducting polymer matrices**  
Balci Z., Akbulut U., Toppare L., Alkan S., Bakir U., Yagci Y.  
JOURNAL OF MACROMOLECULAR SCIENCE-PURE AND APPLIED CHEMISTRY, vol.39, no.3, pp.183-197, 2002 (SCI-Expanded)
- VII. **Immobilization of invertase in conducting polypyrrole polytetrahydrofuran graft polymer matrices**  
Kizilyar N., Akbulut U., Toppare L., Ozden M., Yagci Y.  
SYNTHETIC METALS, vol.104, no.1, pp.45-50, 1999 (SCI-Expanded)
- VIII. **Conducting polymer composites of polypyrrole and a poly(arylene ether ketone)**  
Selampinar F., Akbulut U., Toppare L.  
POLYMER-PLASTICS TECHNOLOGY AND ENGINEERING, vol.37, no.3, pp.295-302, 1998 (SCI-Expanded)
- IX. **Electrically conductive polymer grafts prepared by electrochemical polymerization of pyrrole onto poly[(methyl methacrylate)-co-(2-(N-pyrrolyl) ethyl methacrylate)] electrodes**  
Balci N., Akbulut U., Toppare L., Stanke D., Hallensleben M.  
TURKISH JOURNAL OF CHEMISTRY, vol.22, no.1, pp.73-80, 1998 (SCI-Expanded)
- X. **Electrochemically obtained insulating and conducting polymers and composites of acrylonitrile**  
Yilmaz B., Akbulut U., Toppare L.  
JOURNAL OF MACROMOLECULAR SCIENCE-PURE AND APPLIED CHEMISTRY, no.2, pp.261-291, 1998 (SCI-Expanded)
- XI. **Polypyrrole grafts synthesized via electrochemical polymerization**  
Balci N., Toppare L., Akbulut U., Stanke D., Hallensleben M.  
JOURNAL OF MACROMOLECULAR SCIENCE-PURE AND APPLIED CHEMISTRY, no.10, pp.1727-1739, 1998 (SCI-Expanded)
- XII. **Spontaneous copolymerization of maleic anhydride and N-vinylimidazole in 1,4-dioxane .1. Charge transfer complexation and kinetics of the copolymerization**  
Goksel C., Hacıoglu B., Akbulut U.  
JOURNAL OF POLYMER SCIENCE PART A-POLYMER CHEMISTRY, vol.35, no.17, pp.3735-3743, 1997 (SCI-Expanded)
- XIII. **Synthesis of a hexafluoropropylidene-bis(phthalic anhydride)-based polyimide and its conducting polymer composites with polypyrrole**  
Selampinar F., Akbulut U., Yilmaz T., Gungor A., Toppare L.  
JOURNAL OF POLYMER SCIENCE PART A-POLYMER CHEMISTRY, vol.35, no.14, pp.3009-3016, 1997 (SCI-Expanded)
- XIV. **Polypyrrole grafts with poly[(methyl methacrylate)-co-(2-(N-pyrrolyl) ethyl methacrylate)]**  
Balci N., Akbulut U., Toppare L., Stanke D., Hallensleben M.  
MATERIALS RESEARCH BULLETIN, vol.32, no.10, pp.1449-1458, 1997 (SCI-Expanded)
- XV. **Immobilization of invertase in conducting polymer matrices**  
Selampinar F., Akbulut U., Ozden M., Toppare L.

- BIOMATERIALS, vol.18, no.17, pp.1163-1168, 1997 (SCI-Expanded)
- XVI. **Synthesis of a novel poly(arylene ether ketone) and its conducting composites with polypyrrole**  
Selampinar F., Akbulut U., Yildiz E., Gungor A., Toppare L.  
SYNTHETIC METALS, vol.89, no.2, pp.111-117, 1997 (SCI-Expanded)
- XVII. **Conducting polymer composites of polypyrrole and polyimide**  
Selampinar F., Akbulut U., Toppare L.  
SYNTHETIC METALS, vol.84, pp.185-186, 1997 (SCI-Expanded)
- XVIII. **A pyrolysis mass spectrometry study of polythiophene - Natural rubber and polythiophene - Synthetic rubber conducting polymer composites**  
Yigit S., HACALOĞLU J., AKBULUT U., Toppare L.  
Synthetic Metals, vol.84, pp.205-206, 1997 (SCI-Expanded)
- XIX. **Thermal degradation of polythiophene-natural rubber and polythiophene-synthetic rubber conducting polymer composites**  
HACALOĞLU J., Yiğit S., AKBULUT U., Toppare L.  
Polymer, vol.38, no.20, pp.5119-5124, 1997 (SCI-Expanded)
- XX. **Conducting polymer composites of polypyrrole and polyindene**  
Bozkurt A., Akbulut U., Toppare L.  
SYNTHETIC METALS, vol.82, no.1, pp.41-46, 1996 (SCI-Expanded)
- XXI. **Conducting composites of polypyrrole with polytetramethylbisphenol A carbonate**  
Kalaycioglu E., Akbulut U., Toppare L.  
JOURNAL OF APPLIED POLYMER SCIENCE, vol.61, no.7, pp.1067-1075, 1996 (SCI-Expanded)
- XXII. **Effect of chromium salts on invertase immobilization onto carboxymethylcellulose-gelatine carrier system**  
Emregul E., Sungur S., Akbulut U.  
BIOMATERIALS, vol.17, no.14, pp.1423-1427, 1996 (SCI-Expanded)
- XXIII. **Conducting polymer composites of polythiophene with natural and synthetic rubbers**  
Yigit S., HACALOĞLU J., AKBULUT U., Toppare L.  
Synthetic Metals, vol.79, no.1, pp.11-16, 1996 (SCI-Expanded)
- XXIV. **Conductive polyaniline poly(methyl methacrylate) films obtained by electropolymerization**  
Karakisla M., Sacak M., Akbulut U.  
JOURNAL OF APPLIED POLYMER SCIENCE, vol.59, no.9, pp.1347-1354, 1996 (SCI-Expanded)
- XXV. **A pyrolysis mass spectrometry study of polythiophene-polyamide composites**  
Vatansever F., AKBULUT U., TOPPARE L. K., HACALOĞLU J.  
Polymer, vol.37, no.7, pp.1103-1107, 1996 (SCI-Expanded)
- XXVI. **A conducting composite of polythiophene: Synthesis and characterization**  
Vatansever F., Hacaloglu J., Akbulut U., Toppare L.  
Polymer International, vol.41, no.3, pp.237-244, 1996 (SCI-Expanded)
- XXVII. **STABILITY AND STORAGE-CONDITIONS OF NADH-CYTOCHROME B5 REDUCTASE CROSS-LINKED INTO GELATIN BY CHROMIUM(III) ACETATE**  
YILDIRIM O., AKBULUT U., ARINC E., SUNGUR S.  
BIOMATERIALS, vol.15, no.8, pp.587-592, 1994 (SCI-Expanded)
- XXVIII. **RELATIONSHIP BETWEEN CATHODIC PEAK POTENTIALS AND THEORETICALLY CALCULATED LUMO ENERGIES OF SOME 2-PHENYL BENZOXAZOLE DERIVATIVES**  
GULLU M., YALCIN I., SENER E., TURKER L., CELEBI N., AKBULUT U.  
BULLETIN DES SOCIETES CHIMIQUES BELGES, vol.103, no.3, pp.87-90, 1994 (SCI-Expanded)
- XXIX. **IMMOBILIZATION OF BETA-GALACTOSIDASE ONTO GELATIN BY GLUTARALDEHYDE AND CHROMIUM(III) ACETATE**  
SUNGUR S., AKBULUT U.  
JOURNAL OF CHEMICAL TECHNOLOGY AND BIOTECHNOLOGY, vol.59, no.3, pp.303-306, 1994 (SCI-Expanded)
- XXX. **A CONDUCTING COMPOSITE OF POLYPYRROLE .1. SYNTHESIS AND CHARACTERIZATION**  
SELAMPINAR F., AKBULUT U., YALCIN T., SUZER S., TOPPARE L.

- SYNTHETIC METALS, vol.62, no.3, pp.201-206, 1994 (SCI-Expanded)
- XXXI. **IMMOBILIZATION OF NADH-CYTOCHROME B5 REDUCTASE INTO GELATIN BY CROSS-LINKING**  
YILDIRIM O., AKBULUT U., ARINC E., SUNGUR S.  
JOURNAL OF MACROMOLECULAR SCIENCE-PURE AND APPLIED CHEMISTRY, pp.19-28, 1994 (SCI-Expanded)
- XXXII. **KINETIC-STUDIES IN THE ELECTROINITIATED POLYMERIZATION OF N-VINYLCARBAZOLE AND RELATED CONDUCTING POLYMER COMPOSITES**  
ELIBOL H., HACIOGLU B., AKBULUT U., TOPPARE L.  
JOURNAL OF MACROMOLECULAR SCIENCE-PURE AND APPLIED CHEMISTRY, no.5, pp.593-611, 1994 (SCI-Expanded)
- XXXIII. **CONDUCTING POLYMERS OF ANILINE .2. A COMPOSITE AS A GAS SENSOR**  
DOGAN S., AKBULUT U., YALCIN T., SUZER S., TOPPARE L.  
SYNTHETIC METALS, vol.60, no.1, pp.27-30, 1993 (SCI-Expanded)
- XXXIV. **COMBINED IR AND MASS-SPECTROMETRIC ANALYSIS OF EVOLVED GASES DURING PYROLYSIS OF POLYMERS**  
YALCIN T., AKBULUT U., SUZER S.  
JOURNAL OF MACROMOLECULAR SCIENCE-PURE AND APPLIED CHEMISTRY, pp.55-59, 1993 (SCI-Expanded)
- XXXV. **GLUCOSE-OXIDASE IMMOBILIZED ON GELATIN BY VARIOUS CROSS-LINKERS**  
ELCIN Y., SUNGUR S., AKBULUT U.  
JOURNAL OF MACROMOLECULAR SCIENCE-PURE AND APPLIED CHEMISTRY, pp.137-147, 1993 (SCI-Expanded)
- XXXVI. **CONDUCTING POLYMERS OF ANILINE .1. ELECTROCHEMICAL SYNTHESIS OF A CONDUCTING COMPOSITE**  
DOGAN S., AKBULUT U., TOPPARE L.  
SYNTHETIC METALS, vol.53, no.1, pp.29-35, 1992 (SCI-Expanded)
- XXXVII. **IMMOBILIZATION OF ALPHA-AMYLASE INTO GELATIN FILMS WITH VARIOUS CROSS-LINKERS**  
BAYRAMOGLU Z., AKBULUT U., SUNGUR S.  
BIOORGANIC & MEDICINAL CHEMISTRY LETTERS, vol.2, no.5, pp.427-432, 1992 (SCI-Expanded)
- XXXVIII. **STUDIES ON IMMOBILIZATION OF UREASE IN GELATIN BY CROSS-LINKING**  
SUNGUR S., ELCIN Y., AKBULUT U.  
BIOMATERIALS, vol.13, no.11, pp.795-800, 1992 (SCI-Expanded)
- XXXIX. **IMMOBILIZATION OF UREASE INTO CARBOXYMETHYLCELLULOSE - GELATIN SYSTEM**  
SUNGUR S., ELCIN Y., AKBULUT U.  
JOURNAL OF MACROMOLECULAR SCIENCE-PURE AND APPLIED CHEMISTRY, vol.29, pp.251-265, 1992 (SCI-Expanded)
- XL. **POLYESTER FILM STRIPS COATED WITH PHOTOGRAPHIC GELATIN CONTAINING IMMOBILIZED GLUCOSE-OXIDASE HARDENED BY CHROMIUM(III) SULFATE**  
ELCIN Y., AKBULUT U.  
BIOMATERIALS, vol.13, no.3, pp.156-161, 1992 (SCI-Expanded)
- XLI. **IMMOBILIZATION OF ALPHA-AMYLASE INTO PHOTOGRAPHIC GELATIN BY CHEMICAL CROSS-LINKING**  
BAYRAMOGLU Z., AKBULUT U., SUNGUR S.  
BIOMATERIALS, vol.13, no.10, pp.704-708, 1992 (SCI-Expanded)
- XLII. **ELECTROINITIATED POLYMERIZATION OF BUTADIENE SULFONE**  
AYBAR S., HACIOGLU B., AKBULUT U.  
JOURNAL OF POLYMER SCIENCE PART A-POLYMER CHEMISTRY, vol.29, no.13, pp.1971-1976, 1991 (SCI-Expanded)
- XLIII. **ELECTROINITIATED POLYMERIZATION OF MALEIC-ANHYDRIDE BY DIRECT ELECTRON-TRANSFER**  
AKBULUT U., HACIOGLU B.  
JOURNAL OF POLYMER SCIENCE PART A-POLYMER CHEMISTRY, vol.29, no.2, pp.219-224, 1991 (SCI-Expanded)
- XLIV. **CHARACTERIZATION OF ELECTROINITIATED AND RADIATION POLYMERIZED POLY(BUTADIENE SULFONE)**  
HACIOGLU B., SUZER S., AKBULUT U., TOPPARE L., AYBAR P., UTLEY J.

- JOURNAL OF MACROMOLECULAR SCIENCE-CHEMISTRY, pp.329-345, 1991 (SCI-Expanded)
- XLV. **POLYMERIZATION OF MALEIC-ANHYDRIDE INITIATED BY IMIDAZOLE**  
HACIOGLU B., AKBULUT U.  
JOURNAL OF MACROMOLECULAR SCIENCE-CHEMISTRY, pp.53-58, 1991 (SCI-Expanded)
- XLVI. **POLYESTER FILM STRIPS COATED WITH PHOTOGRAPHIC GELATIN CONTAINING IMMOBILIZED INVERTASE**  
AKBULUT U., SUNGUR S., PEKYARDIMCI S.  
JOURNAL OF MACROMOLECULAR SCIENCE-CHEMISTRY, pp.239-247, 1991 (SCI-Expanded)
- XLVII. **ELECTROINITIATED COPOLYMERIZATION OF INDENE WITH BETA-METHOXYSTYRENE**  
AKBULUT U., KHURSHID A., HACIOGLU B., TOPPARE L.  
POLYMER, vol.31, no.7, pp.1343-1346, 1990 (SCI-Expanded)
- XLVIII. **ELECTRO-INITIATED POLYMERIZATION OF BIS-(2,4,6-TRIBROMOPHENOXY) ETHYLENEDIAMINE COPPER(II) COMPLEX IN DMF AND ITS KINETIC-STUDY BY CYCLIC VOLTAMMETRY**  
TOPPARE L., TUKER L., YIGIT S., KISAKUREK D., AKBULUT U.  
EUROPEAN POLYMER JOURNAL, vol.26, no.3, pp.255-259, 1990 (SCI-Expanded)
- XLIX. **ELECTROINITIATED POLYMERIZATION OF BIS(TRIBROMOPHENOXY)-N,N,N',N'-TETRAMETHYLETHYLENEDIAMINE COPPER(II) COMPLEX**  
AKBULUT U., SACAK M., KISAKUREK D., TOPPARE L.  
BRITISH POLYMER JOURNAL, vol.22, no.1, pp.65-71, 1990 (SCI-Expanded)
- L. **ELECTROINITIATED POLYMERIZATION OF N-VINYLCARBAZOLE BY DIRECT ELECTRON-TRANSFER**  
SACAK M., AKBULUT U., HACIOGLU B.  
JOURNAL OF MACROMOLECULAR SCIENCE-CHEMISTRY, no.8, pp.1041-1052, 1990 (SCI-Expanded)
- LI. **ELECTROINITIATED POLYMERIZATION OF ACROLEIN BY DIRECT AND INDIRECT ELECTRON-TRANSFER VIA CONTROLLED POTENTIAL ELECTROLYSIS**  
TOPPARE L., HACIOGLU B., AKBULUT U.  
JOURNAL OF MACROMOLECULAR SCIENCE-CHEMISTRY, no.3, pp.317-330, 1990 (SCI-Expanded)
- LII. **ELECTROINITIATED POLYMERIZATION OF ACRYLAMIDE BY DIRECT ELECTRON-TRANSFER**  
HACIOGLU B., AKBULUT U., TOPPARE L.  
JOURNAL OF POLYMER SCIENCE PART A-POLYMER CHEMISTRY, vol.27, no.11, pp.3875-3880, 1989 (SCI-Expanded)
- LIII. **ELECTROINITIATED POLYMERIZATION OF BIS(4-BROMO-2,6-DICHLOROPHENOXY)N,N,N',N'-TETRAMETHYLETHYLENEDIAMINE COPPER(II) COMPLEX**  
SACAK M., AKBULUT U., KISAKUREK D., TOPPARE L.  
POLYMER, vol.30, no.5, pp.928-932, 1989 (SCI-Expanded)
- LIV. **ELECTROINITIATED POLYMERIZATION OF BIS(TRICHLOROPHENOXY)-TETRAMETHYLETHYLENE DIAMINE COPPER(II)**  
SACAK M., AKBULUT U., KISAKUREK D., TURKER L., TOPPARE L.  
JOURNAL OF POLYMER SCIENCE PART A-POLYMER CHEMISTRY, vol.27, no.5, pp.1599-1608, 1989 (SCI-Expanded)
- LV. **POLYMERIZATION OF BIS(TRICHLOROPHENOXY) ETHYLENEDIAMINE COPPER (II) COMPLEX BY ELECTRO-OXIDATION**  
YIGIT S., KISAKUREK D., TURKER L., TOPPARE L., AKBULUT U.  
POLYMER, vol.30, no.2, pp.348-352, 1989 (SCI-Expanded)
- LVI. **ELECTROINITIATED POLYMERIZATION OF THE BIS(2,6-DIBROMO-4-CHLOROPHENOXY)-N,N,N',N'-TETRAMETHYLETHYLENEDIAMINE COPPER (II) COMPLEX**  
AKBULUT U., SACAK M., KISAKUREK D., TOPPARE L.  
JOURNAL OF MACROMOLECULAR SCIENCE-CHEMISTRY, no.12, pp.1623-1635, 1989 (SCI-Expanded)
- LVII. **ELECTROINITIATED POLYMERIZATION OF HALOPHENOLS - ELECTROINITIATION POTENTIAL LUMO RELATIONS**  
TURKER L., KISAKUREK D., SEN S., TOPPARE L., AKBULUT U.  
JOURNAL OF POLYMER SCIENCE PART B-POLYMER PHYSICS, vol.26, no.12, pp.2485-2498, 1988 (SCI-Expanded)
- LVIII. **ELECTROINITIATED POLYMERIZATION OF ACRYLONITRILE**

YURTTAS B., TOPPARE L., AKBULUT U.

JOURNAL OF MACROMOLECULAR SCIENCE-CHEMISTRY, no.2, pp.219-230, 1988 (SCI-Expanded)

**LIX. ELECTROINITIATED COPOLYMERIZATION OF ISOPRENE WITH INDENE**

KHURSHID A., TOPPARE L., AKBULUT U.

POLYMER COMMUNICATIONS, vol.28, no.9, pp.269-271, 1987 (SCI-Expanded)

**LX. ELECTROINITIATED CATIONIC COPOLYMERIZATION OF 4-BROMOSTYRENE AND ALPHA-METHYLSTYRENE IN THE PRESENCE OF ULTRASONIC VIBRATION**

EREN S., TOPPARE L., AKBULUT U.

POLYMER COMMUNICATIONS, vol.28, no.1, pp.36-38, 1987 (SCI-Expanded)

**LXI. The redox behaviour of square-planar trans-dicyanodihalogenoaurate(III) complexes in acetonitrile**

HACALOĞLU J., Tunali N. K., AKBULUT U.

Journal of the Chemical Society, Dalton Transactions, no.4, pp.715-717, 1984 (SCI-Expanded)

## Metrics

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## Non Academic Experience

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