

## Asst. Prof. MEHTAP YAKUT

### Personal Information

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### International Researcher IDs

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Publons / Web Of Science ResearcherID: AAG-3209-2020

ScopusID: 57201184664

Yoksis Researcher ID: 184794

### Education Information

Doctorate, Ankara University, Fen Bilimleri Enstitüsü, Kimya (Dr), Turkey 2005 - 2012

Postgraduate, Ankara University, Fen Bilimleri Enstitüsü, Kimya (YI) (Tezli), Turkey 2002 - 2005

Undergraduate, Ankara University, Fen Fakültesi, Kimya Bölümü, Turkey 1998 - 2002

### Dissertations

Postgraduate, Furokumarin ve Furokinolin Bileşiklerinin Mangan(III) asetat Aracılığıyla Sentezi, Ankara University, Fen Bilimleri Enstitüsü, Kimya (YI) (Tezli), 2005

### Research Areas

Chemistry, Natural Sciences

### Academic Titles / Tasks

Assistant Professor, Ankara University, Fen Fakültesi, Kimya Bölümü, 2020 - Continues

Research Assistant, Ankara University, Fen Fakültesi, Kimya Bölümü, 2002 - 2020

### Courses

Organic Chemistry, Undergraduate, 2021 - 2022

CHEMISTRY, Undergraduate, 2022 - 2023

Organic Chemistry Laboratory II, Undergraduate, 2022 - 2023

Basic Chemistry 1, Undergraduate, 2022 - 2023

THE CHEMISTRY OF DYES, Undergraduate, 2021 - 2022

Organic Chemistry, Undergraduate, 2021 - 2022

Özel Konu, Undergraduate, 2022 - 2023

Organic Chemistry Laboratory, Undergraduate, 2021 - 2022

Organik Analiz, Undergraduate, 2022 - 2023  
Organik Kimyada Koruyucu Gruplar, Postgraduate, 2022 - 2023  
Basic Chemistry 2, Undergraduate, 2021 - 2022  
Organic Chemistry, Undergraduate, 2021 - 2022  
Organic Chemistry Laboratory, Undergraduate, 2022 - 2023  
ORGANIC CHEMISTRY, Undergraduate, 2022 - 2023  
Organik Kimya Laboratuvarı II, Undergraduate, 2022 - 2023  
KİM 134 Organik Kimya, Undergraduate, 2018 - 2019  
CHM 126 Organic Chemistry, Undergraduate, 2018 - 2019  
KİM 113 Temel Kimya, Undergraduate, 2017 - 2018

## Advising Theses

Yakut M., Kumarin halkası içeren yeni organik moleküllerin sentezi ve spektroskopik özelliklerinin incelenmesi, Postgraduate, M.NAZIR(Student), 2023

## Jury Memberships

Post Graduate, Post Graduate, Ankara Üniversitesi, December, 2023  
PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Ankara Üniversitesi, September, 2023  
PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Ankara Üniversitesi, September, 2023  
Doctorate, Doctorate, Ankara Üniversitesi, August, 2023

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

- I. **Synthesis, Characterization, and Optimization of Novel Furan-ring Fused Chalcones via Radical Cyclization of  $\alpha,\beta$ -Unsaturated Ketones and Cyclic Ketone**  
Burgaz E. V., Noshadi B., Yakut M.  
LETTERS IN ORGANIC CHEMISTRY, vol.21, no.6, pp.534-540, 2024 (SCI-Expanded)
- II. **Phosphorus-nitrogen compounds. Part 72. Bisspiro(N/N) cyclotri-phosphazenes with 4-chlorobenzyl and ferrocenyl pendant arms: Synthesis, structural characterization, dye-sensitized solar cell fabrication and antituberculosis activity studies**  
Berberoğlu İ., Cemaloğlu R., Binici A., Yakut M., Asmafiliz N., Kılıç Z., Güzel R., Şimşek H., Hökelek T.  
JOURNAL OF MOLECULAR STRUCTURE, vol.1310, no.138305, pp.1-14, 2024 (SCI-Expanded)
- III. **Phosphorus-nitrogen compounds: part 71. Novel unsymmetrically-substituted dispiro-cyclotriphosphazenes: synthesis, characterization, antituberculosis activity, and phototunable charge storage studies**  
Cemaloğlu R., Berberoğlu I., Yakut M., Binici A., Asmafiliz N., Kilic Z., Guzel R., Erdal G., Şimşek H., Hokelek T.  
NEW JOURNAL OF CHEMISTRY, no.42, pp.19788-19800, 2023 (SCI-Expanded)
- IV. **Manganese(III) Acetate-Based Radical Cyclization Reactions for Pyranocoumarin and Pyranoquinoline Compounds: Synthesis, DFT and Molecular Docking Studies**  
YAKUT M., YILMAZ M., Pekel T., ERKAN S., Katirci R., Bicer E.  
CHEMISTRYSELECT, vol.7, no.44, 2022 (SCI-Expanded)
- V. **Phosphorus-nitrogen compounds. Part 64. Comparative reactions of spiro and ansa (N/O) cyclotetraphosphazenes with bulky (4-fluorobenzyl) N/N and N/O donor type bidentate reagents: structure, stereogenic properties and cytotoxic activity studies**

Elmas G., Binici A., Yakut M., Okumuş A., Kilic Z., Çoşut B., Hökelek T., Cerci N. A., Açık L.  
NEW JOURNAL OF CHEMISTRY, vol.46, no.33, pp.16096-16113, 2022 (SCI-Expanded)

- VI. **Phosphorus-nitrogen compounds part 59. The syntheses of tetrachloro and tetraamino-2-pyridylmethylspiro(N/N)ethylenediaminocyclotriphosphazenes: Structural characterization, bioactivity, and molecular docking studies**  
Bozkurt B., Elmas G., Yakut M., Okumuş A., Cerci N. A., Zeyrek C. T., Kilic Z., Açık L., Hokelek T.  
JOURNAL OF THE CHINESE CHEMICAL SOCIETY, vol.69, no.2, pp.310-331, 2022 (SCI-Expanded)
- VII. **Phosphorus-nitrogen compounds. Part 56. Comparative syntheses and spectral properties of multiheterocyclic 2-cis-4-ansa and spiro-ferrocenyl (N/O)cyclotetraphosphazenes: Antituberculosis and antimicrobial activity and DNA interaction studies**  
Binici A., Okumuş A., Yakut M., Elmas G., Kilic Z., Koyunoglu D., Açık L., Şimşek H.  
PHOSPHORUS SULFUR AND SILICON AND THE RELATED ELEMENTS, vol.197, no.1, pp.18-29, 2022 (SCI-Expanded)
- VIII. **Phosphorus-nitrogen compounds Part 55. Syntheses of 4-methoxybenzylspiro(N/N)cyclotriphosphazenes: chemical, structural and biological properties**  
Güven Kuzey N., CEMALOĞLU R., YAKUT M., ASMAFİLİZ N., Kilic Z., AYDIN B., AÇIK L., HÖKELEK T.  
RESEARCH ON CHEMICAL INTERMEDIATES, vol.47, no.10, pp.3933-3962, 2021 (SCI-Expanded)
- IX. **Phosphorus-nitrogen compounds: Part 46. The reactions of N<sub>3</sub>P<sub>3</sub>Cl<sub>6</sub> with bidentate and monodentate ligands: The syntheses, structural characterizations, antimicrobial and cytotoxic activities, and DNA interactions of (N/N)spirocyclotriphosphazenes with 4-chlorobenzyl pendant arm**  
ASMAFİLİZ N., Berberoglu I., YAKUT M., Kilic Z., Kayalak H., AÇIK L., TÜRK M., HÖKELEK T.  
INORGANICA CHIMICA ACTA, vol.495, 2019 (SCI-Expanded)
- X. **Synthesis and spectroscopic properties of a novel "turn off" fluorescent probe: Thienyl-pyridine substituted BODIPY**  
SEVİNÇ G., YAKUT M., Kucukoz B., KARATAY A., ASLAN H., Yilmaz H.  
JOURNAL OF LUMINESCENCE, vol.211, pp.334-340, 2019 (SCI-Expanded)
- XI. **Phosphorus-Nitrogen compounds part 47: The conventional and microwave-assisted syntheses of dispirocyclotriphosphazene derivatives with (4-fluoro/4-nitrobenzyl) pendant arms: Structural and stereogenic properties and DNA interactions**  
Tanrikulu G. I., YAKUT M., OKUMUŞ A., Kilic Z., HÖKELEK T., AYDIN B., AÇIK L.  
INORGANICA CHIMICA ACTA, vol.490, pp.179-189, 2019 (SCI-Expanded)
- XII. **Efficient syntheses and antimicrobial activities of new thiophene containing pyranone and quinolinone derivatives using manganese(III) acetate: the effect of thiophene on ring closure-opening reactions**  
YAKUT M., YILMAZ M., Nishino H., ÇINAR AVAR E., DAL H., Pekel A. T., HÖKELEK T.  
NEW JOURNAL OF CHEMISTRY, vol.43, no.15, pp.5737-5751, 2019 (SCI-Expanded)
- XIII. **An experimental and theoretical approach towards understanding the inhibitive behavior of a nitrile substituted coumarin compound as an effective acidic media inhibitor**  
Fitoz A., NAZIR H., Ozgur (nee Yakut) M., EMREGÜL E., EMREGÜL K. C.  
CORROSION SCIENCE, vol.133, pp.451-464, 2018 (SCI-Expanded)
- XIV. **Synthesis, characterization, and investigations of antimicrobial activity of benzopyrans, benzofurans and spiro[4.5]decenes**  
Akpınar D. E., Ozgur (Nee Yakut) M., Aslan H., ALAGÖZ O., Oktemer A., DAL H., HÖKELEK T., LOĞOĞLU E.  
SYNTHETIC COMMUNICATIONS, vol.48, no.19, pp.2510-2521, 2018 (SCI-Expanded)
- XV. **Synthesis of 4,5-Dihydrofuran-3-carbonitrile Derivatives with Electron-Rich Alkenes in the Presence of Manganese(III) Acetate**  
Yılmaz M., Burgaz E. V., YAKUT M., Bicer E.  
JOURNAL OF THE CHINESE CHEMICAL SOCIETY, vol.61, no.10, pp.1101-1107, 2014 (SCI-Expanded)
- XVI. **Synthesis of Dihydropyrans and Dihydrofurans via Radical Cyclization of Unsaturated Alcohols and 1,3-Dicarbonyl Compounds**

Aslan H., Akpınar D. E., Oktemer A., YAKUT M., ALAGÖZ O.  
HELVETICA CHIMICA ACTA, vol.97, no.5, pp.652-663, 2014 (SCI-Expanded)

- XVII. **Mn(III)-based reaction of alkenes with quinolinones. Formation of peroxyquinolinones and quinoline-related derivatives**  
Nishino H., Kumabe R., Hamada R., YAKUT M.  
TETRAHEDRON, vol.70, no.7, pp.1437-1450, 2014 (SCI-Expanded)
- XVIII. **Synthesis and biological activity studies of furan derivatives**  
LOĞOĞLU E., YILMAZ M., KATIRCIOĞLU H., YAKUT M., Mercan S.  
Medicinal Chemistry Research, vol.19, no.5, pp.490-497, 2010 (SCI-Expanded)
- XIX. **Oxidative cyclisation of 3-oxopropanenitriles mediated manganese(III) acetate with 2-thienyl substituted Alkenes**  
YILMAZ M., Uzunalioglu N., YAKUT M., Pekel A. T.  
TURKISH JOURNAL OF CHEMISTRY, vol.32, no.4, pp.411-422, 2008 (SCI-Expanded)
- XX. **Synthesis of 2,3-Dihydro-4H-furo[3,2-c] chromen-4-ones and 2,3-dihydronaphtho[2,3-b]furan-4,9-diones by the radical cyclizations of hydroxyenones with electron-rich alkenes using manganese(III) acetate**  
YILMAZ M., YAKUT M., Pekel A. T.  
SYNTHETIC COMMUNICATIONS, vol.38, no.6, pp.914-927, 2008 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Ultrasound-Assisted One-Pot Synthesis of 9-(Substituted heteroaryl) acridinedione Derivatives**  
BAYRAMOĞLU D., ÖZGÜR M.  
Düzce Üniversitesi Bilim ve Teknoloji Dergisi, vol.9, pp.1610-1620, 2021 (Peer-Reviewed Journal)
- II. **Syntheses of New Polysubstituted Dihydrofurans Mediated''**  
EROĞLU F., ÖZGÜR M., ASLAN H.  
Commun. Fac.Sci.Univ .Ank. Series B, vol.60, no.1, pp.17-24, 2019 (Peer-Reviewed Journal)

## Books & Book Chapters

- I. **Organik Kimya İkinci Bir Dil (İkinci Dönem Konuları)**  
Kalkan M., Yakut M., Bayramoğlu D., Kurtay G., Eroğlu F. (Editor)  
Palme Yayın Dağıtım, Ankara, 2023
- II. **Organik Kimya İkinci Bir Dil (Birinci Dönem Konuları)**  
Kalkan M., Yakut M., Bayramoğlu D., Kurtay G., Eroğlu F. (Editor)  
Palme Yayın Dağıtım, Ankara, 2022

## Refereed Congress / Symposium Publications in Proceedings

- I. **Partly and Fully Primer Amine Substituted Mono- ferrocenylcyclotetraphosphazenes: The Investigations of Syntheses, The Antimicrobial and Dna Cleavage Activities**  
ELMAS G., OKUMUŞ A., YAKUT M., Binici A., KILIÇ Z., Koyunoğlu D., AÇIK L.  
International Asian Congress on Contemporary Sciences-V, Azerbaijan, 01 June 2021
- II. **Partly and Fully Primer Amine Substituted Mono- ferrocenylcyclotetraphosphazenes: The Investigations of Syntheses**  
Elmas G., Okumuş A., Yakut M., Binici A., Kılıç Z., Koyunoğlu D., Açık L.  
International Asian Congress on Contemporary Sciences-V, Nakhchivan, Azerbaijan, 1 - 02 June 2021, pp.35
- III. **Antimicrobial Activities and DNA Interactions of (N/N) Cyclotriphosphazenes with 4-Methoxybenzyl**

## Pendant Arm

Güven Kuzey N., Yakut M., Cemaloğlu R., Asmafiliz N., Kılıç Z., Açıık L., Aydın B., Hökelek T.

CELL BIO Virtual 2020. An online ASCB/EMBO Meeting, California, United States Of America, 2 - 16 December 2020

- IV. **Anticancer Activities of Spiro(N/O) and 2-cis-4-Ansa(N/O) Cyclotetraphosphazene Derivatives**  
OKUMUŞ A., ELMAS G., YAKUT M., Binici A., KILIÇ Z., ÇERÇİ N. A., AÇIK L., TÜRK M.  
Cell Bio Virtual 2020, baltimore, United States Of America, 02 December 2020
- V. **Cytotoxic Effects of Novel Diazaspiro Undecane Derivatives Against HCC Cancer Cells**  
BURGAZ E. V., KUNTER İ., YAKUT M.  
9th International Molecular Biology and Biotechnology Congress, 6 - 10 October 2020
- VI. **Synthesis and investigations of antibacterial activity of new squaramide compound**  
KALKAN M., ORHAN YANIKAN E., YAKUT M.  
3rd International Eurasian Conference on Biological and Chemical Sciences (EurasianBioChem 2020), 19 - 20 March 2020
- VII. **Yeni 7,11-diaril-3-tiyookso-2,4-diazaspiro[5,5]undekan-1,5,9-trion Bileşiklerinin Sentezi**  
BURGAZ E. V., YAKUT M.  
International 8. Drug Chemistry Conference, 27 February - 03 March 2020
- VIII. **Synthesis of new polysubstituted dihydrofuroquinolinone compounds: Investigations of theoretical and experimental spectroscopic analysis**  
YAKUT M., KALKAN M., Kaleli N. M., Şahin M.  
3rd International Eurasian Conference on Biological and Chemical Sciences (EurasianBioChem 2020), 19 - 20 March 2020
- IX. **Ultrasound-assisted Synthesis of Novel Potential Biological Active 1,4-Dihydropyridines**  
YAKUT M., BAYRAMOĞLU D.  
2. Eurasia Biochemical Approaches and Technologies Congress (2. EBAT), 26 - 29 October 2019
- X. **Mono-Ferrosenil N/O Spirosiklotetrafosfazenlerin N/O Dönörlü 4-florobenzil Ligandları ile Reaksiyonları ve Spektral Özellikleri**  
ELMAS G., OKUMUŞ A., Binici A., YAKUT M., KILIÇ Z.  
2nd International Eurasian Conference on Biological and Chemical Sciences (EurasianBioChem 2019), Turkey, 28 June 2019
- XI. **Kısmen ve Tamamen Primer Amin Sübstitüe Mono-Ferrosenil Spirosiklotetrafosfazen Türevlerinin Antitüberküloz Aktiviteleri**  
ELMAS G., OKUMUŞ A., Binici A., YAKUT M., ŞİMŞEK H., KILIÇ Z.  
2nd International Eurasian Conference on Biological and Chemical Sciences (EurasianBioChem 2019), Turkey, 28 June 2019
- XII. **Tiyenil-Piridin BODIPY Bileşiğinin Sentezi ve Fotofiziksel Özelliklerinin Belirlenmesi**  
SEVİNÇ G., ÖZGÜR M., Küçüköz B., KARATAY A., ASLAN H., Yılmaz H.  
VII. Ulusal Anorganik Kimya Kongresi, Çorum, Turkey, 19 - 22 June 2019
- XIII. **Dispiro-4-bromobenzylaminophosfazenes: Synthesize reactions, spectroscopic properties, crystal structures, biological and cytotoxic activities**  
Kuzey N. G., YAKUT M., ASMAFİLİZ N., AÇIK L., AYDIN B., HÖKELEK T., TÜRK M., Cerci N. A.  
257th National Meeting of the American-Chemical-Society (ACS), Florida, United States Of America, 31 March - 04 April 2019, vol.257
- XIV. **Synthesis of New Furyl-substituted Dihydrofuran Compounds**  
ÖZGÜR M., ALAGÖZ O., YILMAZ M.  
ANCON 2017, Ankara, Turkey, 5 - 07 October 2017
- XV. **Doymamış Alkollerden Polisubstitüe Dihydrofuran Bileşiklerinin Sentezi**  
ASLAN H., YAKUT M., ÖKTEMER A.  
27. Ulusal Kimya Kongresi, Turkey, 23 - 28 August 2015
- XVI. **Synthesis of New Polysubstitue Dihydrofurans**  
YAKUT M., ASLAN H., ÖKTEMER A.  
Anatolian Conference on Synthetic Organic Chemistry, 16 - 19 March 2015

- XVII. **Manganese III Based Oxidation of Cyclic 1,3-Dicarbonyl Compounds in the Presence of Unsaturated Alcohol**  
ASLAN H., AKPINAR D., YAKUT M., ALAGÖZ O., ÖKTEMER A.  
44th World Chemistry, 11 - 16 August 2013
- XVIII. **Manganese III based oxidation of cyclic hydroxyenones in the presence of heteroaromatic alkenes**  
YAKUT M., NISHINO H., YILMAZ M., A. TARIK P.  
The 11th International Chemistry Conference and Exhibition (11ICCA), 20 - 23 November 2010
- XIX. **β-Dikarbonil Bileşiklerinin Mangan III Asetat Aracılığıyla α,β-Doymamış Alkollerle Radikalik Halkalaşma Reaksiyonları**  
ASLAN H., YAKUT M., AKPINAR D., ALAGÖZ O., ÖKTEMER A.  
XXIV. Ulusal Kimya Kongresi, Turkey, 29 June - 02 July 2010
- XX. **Hiroshi Nishino Md Aminul Haque Mehtap Yakut Hikaru Igarashi Synthesis of peroxy nitrogen heterocycles using manganese III catalyzed aerobic oxidation**  
HİROSHİ N., Haque A., YAKUT M., Igarashi H.  
40th Congress of Heterocyclic Chemistry, 14 - 16 September 2010
- XXI. **Manganese III acetate mediated synthesis of new angular dihydrofurocoumarines and dihydrofuroquinolinones 2009 Italy**  
YAKUT M., YILMAZ M., ALAGÖZ O., PEKEL A. T.  
10th FIGIPAS, 1 - 05 January 2009
- XXII. **Synthesis of dihydrofuroopyrano 3,2-C quinolines using manganese III acetate by free radical cyclization**  
YAKUT M., YILMAZ M., ALAGÖZ O., PEKEL A. T.  
Sixth International Conference of the Chemical Societies of the South-Eastern European Countries, 1 - 08 August 2008

## Supported Projects

- Asmafiliz N., Kılıç Z., Yakut M., Açık L., Hökelek T., Çoşut B., TÜBİTAK Project, Synthesis, Investigation of Structural, Chiral and Biological Properties of Partly and Fully-Substituted Mono and Dispiro(pyrazolinediamino)cyclotriphosphazenes, 2023 - 2025
- Yakut M., Cemaloğlu R., TÜBİTAK Project, Karbazol ve Benzildiamino Pendant Kolları İçeren (N/N)Dispirosiklotrifosfazen Türevlerinin Sentezi: Spektral, Kristallografik, Fotofiziksel, Stereojenik Özelliklerinin ve Biyolojik Aktivitelerinin İncelenmesi, 2022 - 2023
- Yakut M., Bayramoğlu D., Güllü M., TÜBİTAK Project, Yeni Heterosiklik Amin Temelli Dihidropiridin Hibrit Moleküllerin Sentezi ve Biyolojik Özelliklerinin incelenmesi, 2022 - 2023
- Elmas G., Okumuş A., Yakut M., TÜBİTAK Project, N/N Donör Atomlu (2-tiyofenilmetil)spirosiklotrifosfazen Türevlerinin Sentezi: Stereojenik, Antimikrobiyal ve Antioksidan Özelliklerinin Belirlenmesi, Kanser ve Kanser Kök Hücreleri Üzerindeki Antiproliferatif Etkilerinin İki Boyutlu Hücre Kültürü ile Üç Boyutlu Tümör Modelinde Araştırılması, 2021 - 2023
- YAKUT M., TÜBİTAK Project, Yeni Ferrosen Sübstitüe Bileşiklerin Sentezi ve Karakterizasyonu, 2015 - 2016
- YAKUT M., Project Supported by Higher Education Institutions, Yeni Polisübtitüe Dihidrofuran Bileşiklerinin Sentezi Biyolojik Aktiviteleri İndirgenme ve Molekülicü Halkalaşma Reaksiyonlarının İncelenmesi, 2013 - 2016
- YAKUT M., Project Supported by Higher Education Institutions, Halkalı hidroksienon bileşiklerinin mangan III asetat aracılığıyla tiyenil sübstitüe alkenlerle radikalik halkalaşma reaksiyonları, 2010 - 2012
- YAKUT M., Project Supported by Higher Education Institutions, 3 Oksopropannitrillerin mangan III asetat aracılığıyla doymamış amitlerle radikalik halkalaşma reaksiyonları ve 4,5-siyano 2,3-dihidrofuran 3-dihidrofuran 3-karboksiamitlerin sentezi, 2007 - 2009
- YAKUT M., Project Supported by Higher Education Institutions, Aktif metilen bileşiklerinin mangan III asetat aracılığıyla β-doymamış amitlerle radikalik halkalaşma reaksiyonları ve karbamoil dihidrofuran bileşiklerinin sentezi, 2005 - 2007
- YAKUT M., TÜBİTAK Project, Dihidrofuropirano 3,2-C kinolin bileşiklerinin mangan III asetat kullanarak radikalik

halkalařma reaksiyonuyla sentezi, 2005 - 2006

YAKUT M., TUBITAK Project, Aktif metilen bileřiklerinin MAH aracılıęıyla alkenlerle radikalik halkalařma reaksiyonları ve furokumarin furokinolin ve furonaftokinon bileřiklerinin sentezi, 2004 - 2006

YAKUT M., Project Supported by Higher Education Institutions, MAH aracılıęı ile asimetric 2 triflormetil dihidrofuran bileřiklerinin sentezi, 2003 - 2005

## Scientific Refereeing

Journal of the Turkish Chemical Society, Section A: Chemistry, National Scientific Refreed Journal, April 2024

JOURNAL OF MOLECULAR STRUCTURE, SCI Journal, November 2023

## Metrics

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