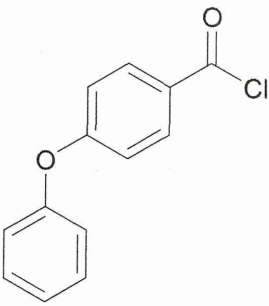
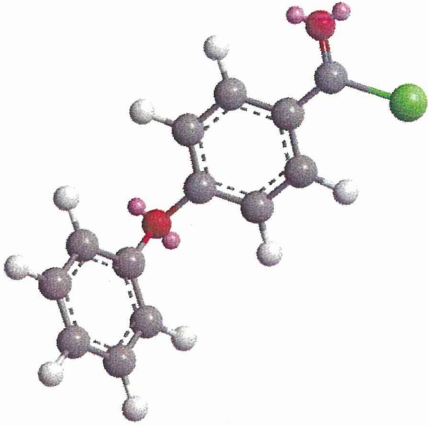
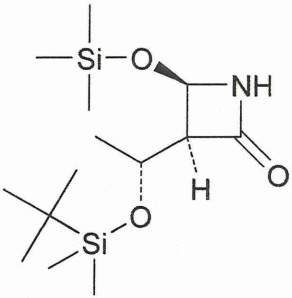
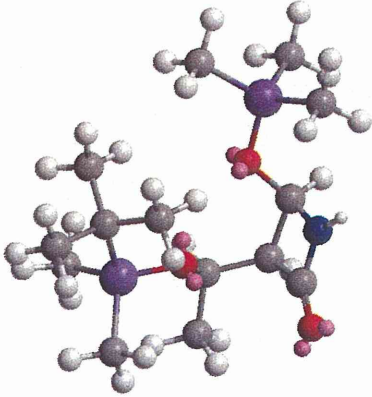
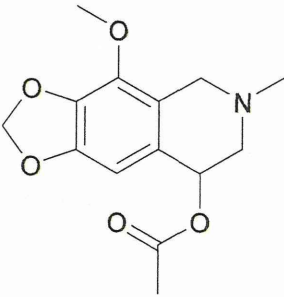
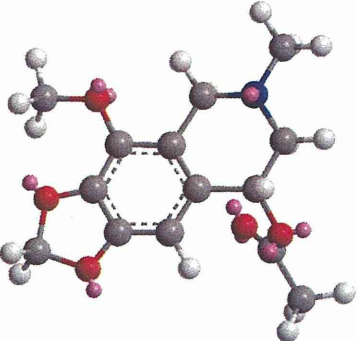
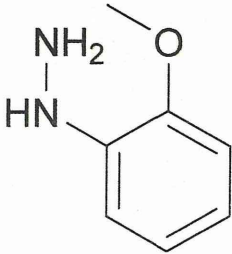
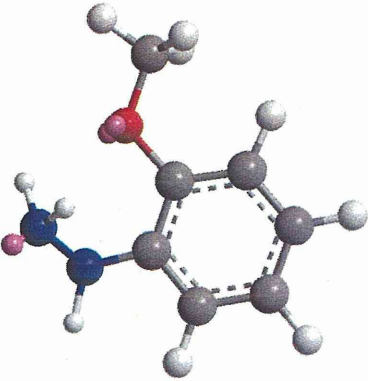
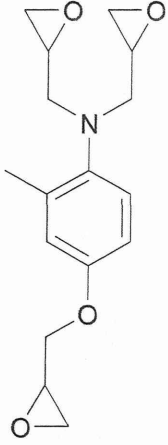
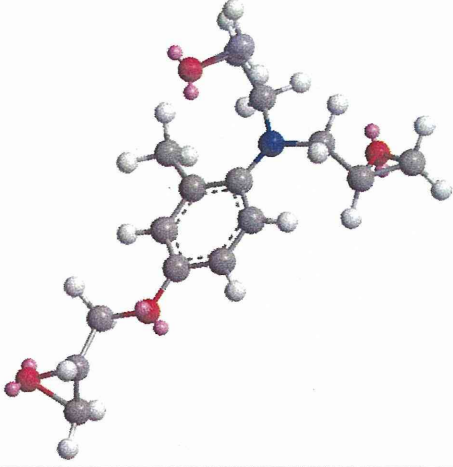
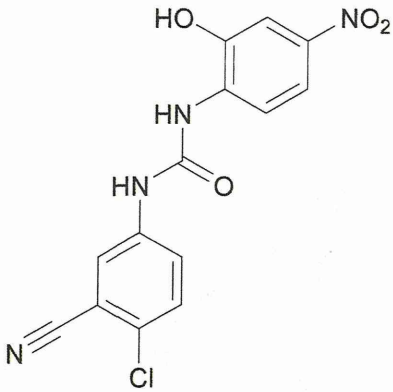
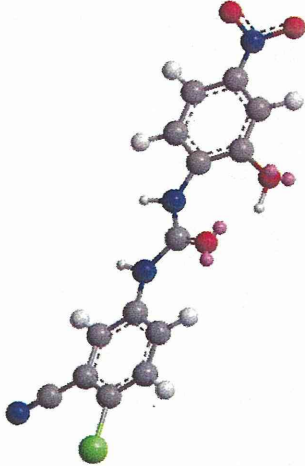
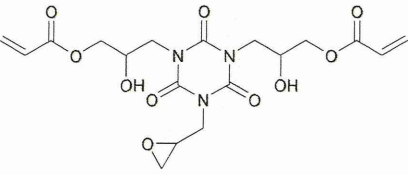
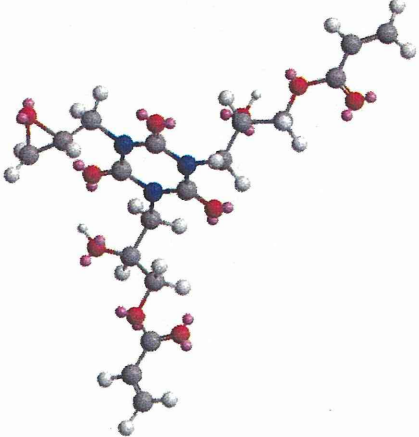
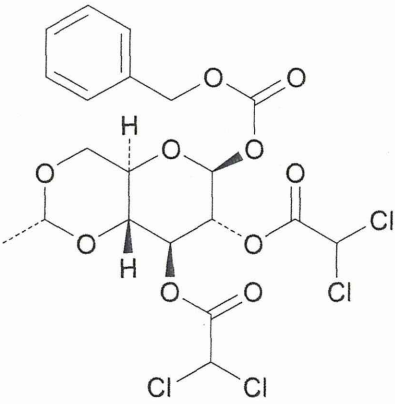
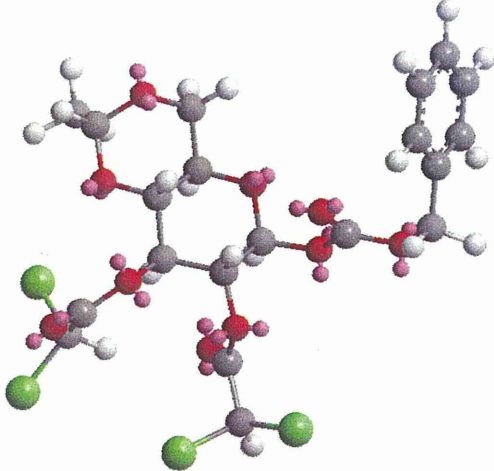
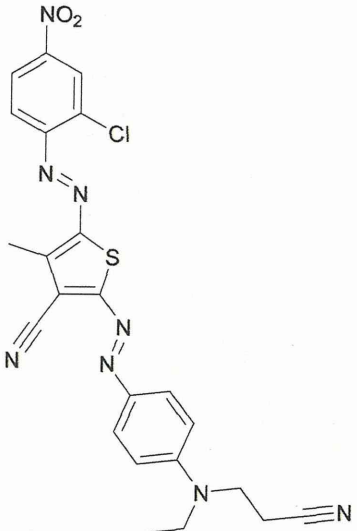
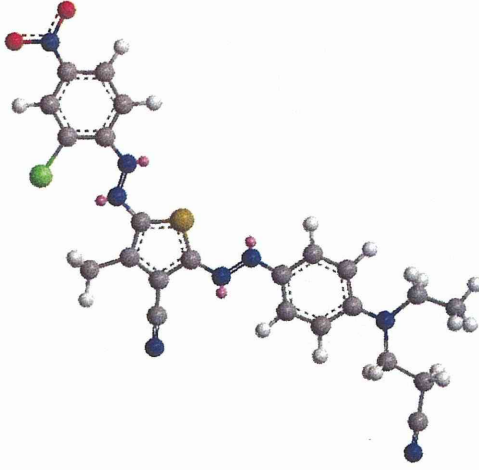
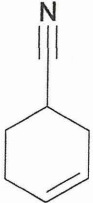
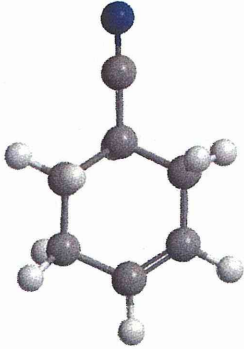
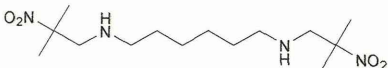
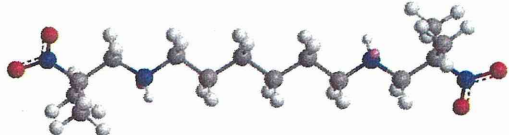
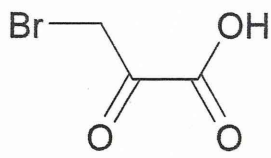
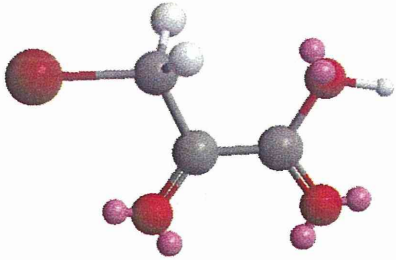
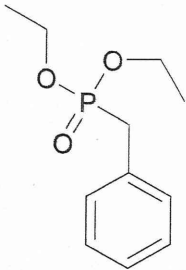
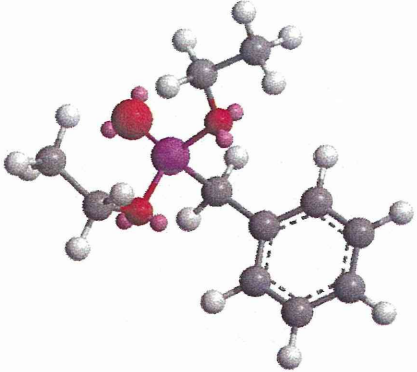
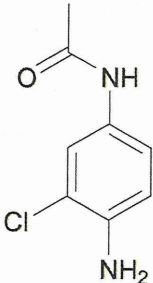
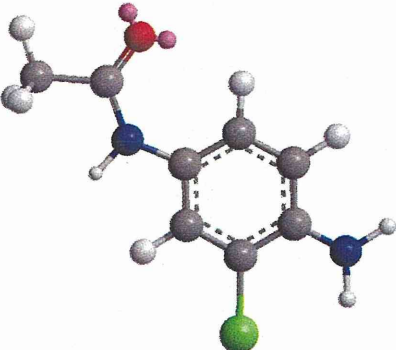
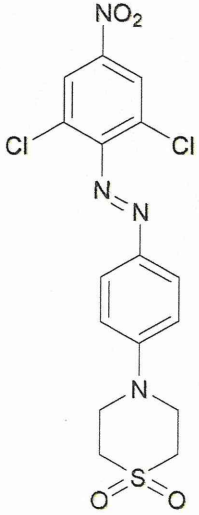
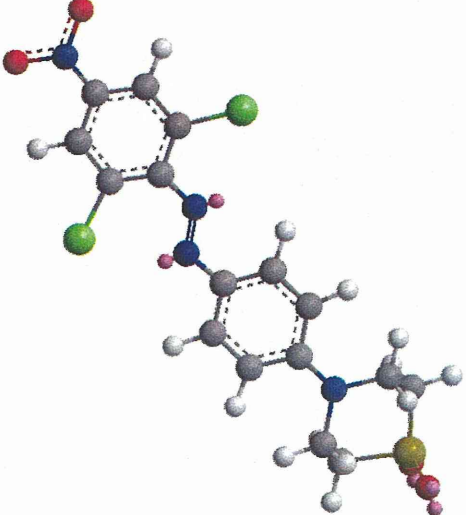
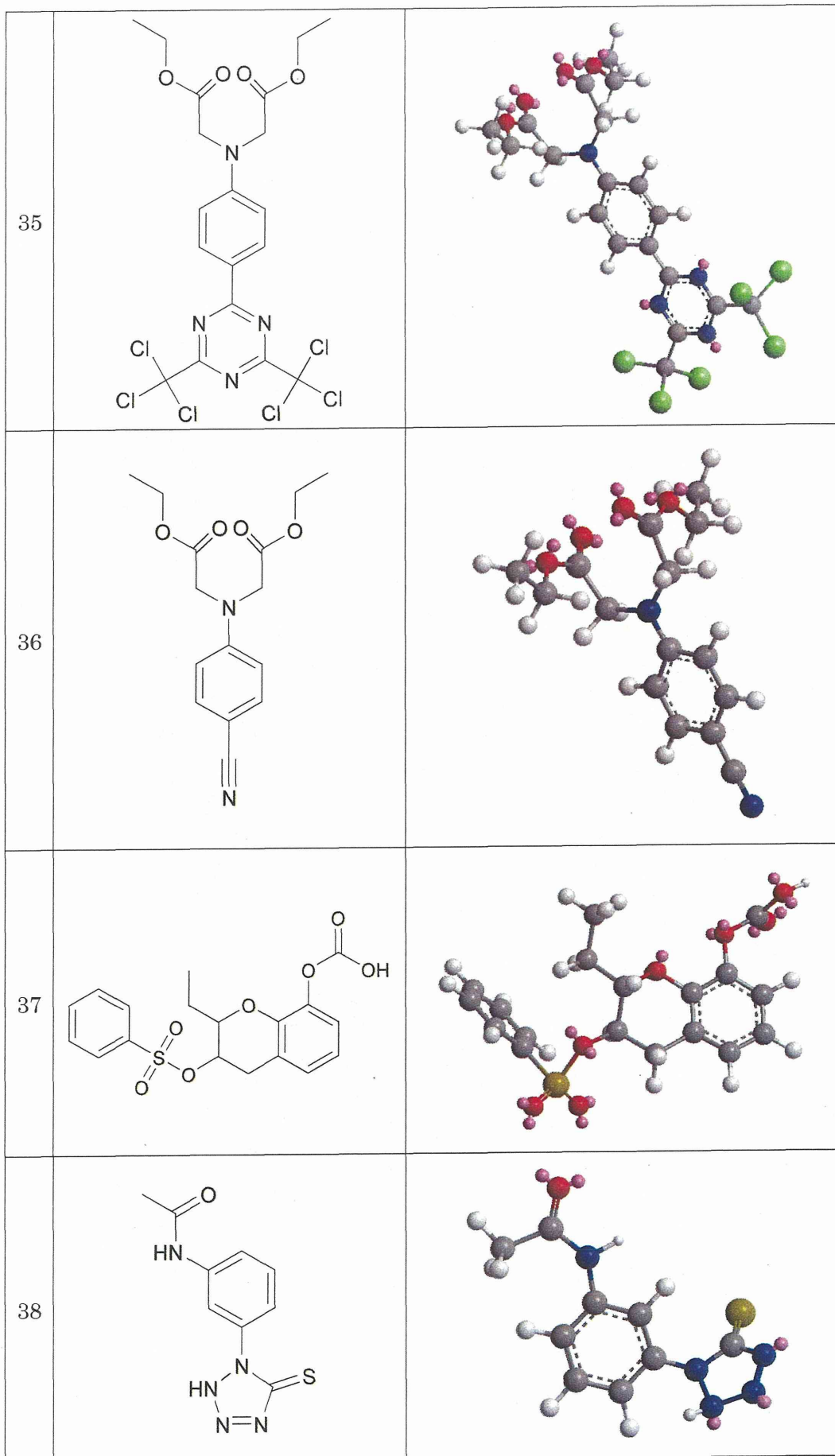


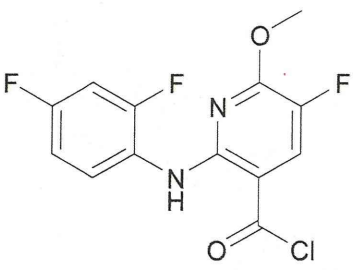
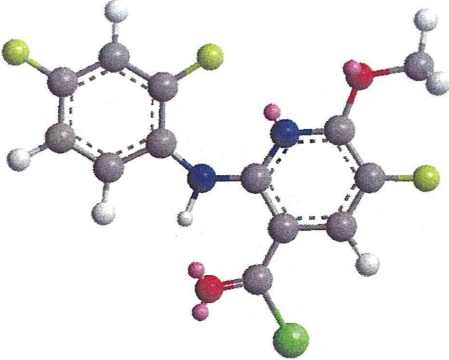
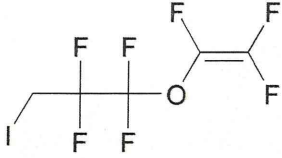
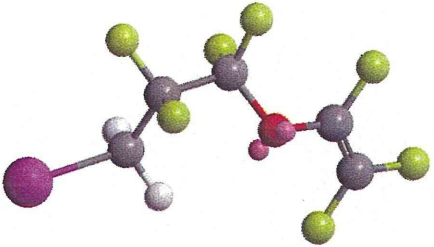
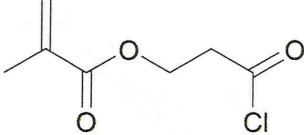
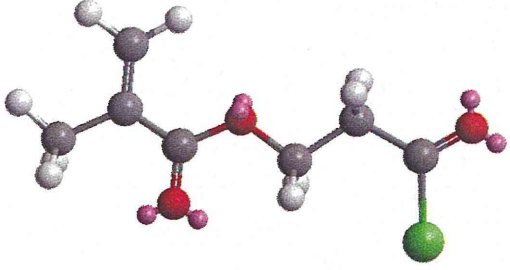
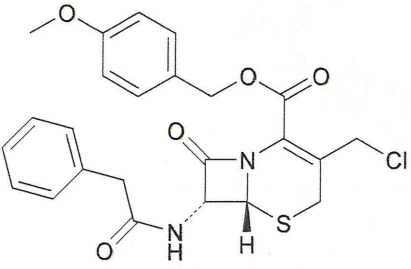
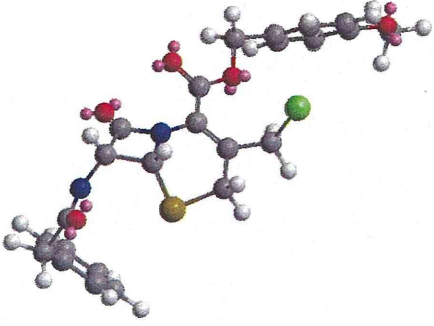
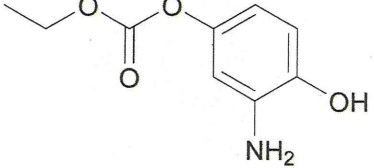
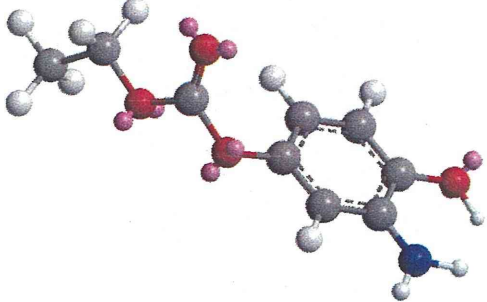
20	 <p>Chemical structure of 4-(benzyloxy)benzoyl chloride, showing a benzene ring with a benzyloxy group (-OCH<sub>2</sub>Ph) and a benzoyl chloride group (-COCl) in the para position.</p>	 <p>3D ball-and-stick model of 4-(benzyloxy)benzoyl chloride, showing the spatial arrangement of atoms (C, O, Cl, H) and the orientation of the benzyloxy and benzoyl chloride groups.</p>
21	 <p>Chemical structure of a cyclic siloxane-urea derivative, featuring a five-membered ring with a nitrogen atom, a carbonyl group, and a hydrogen atom, connected to a silicon atom which is part of a larger siloxane network.</p>	 <p>3D ball-and-stick model of the cyclic siloxane-urea derivative, showing the spatial arrangement of atoms (C, N, O, Si, H) and the orientation of the ring and substituents.</p>
22	 <p>Chemical structure of a complex heterocyclic molecule, featuring a benzene ring fused to a six-membered ring containing a nitrogen atom, with a methoxy group and a carbonyl group attached.</p>	 <p>3D ball-and-stick model of the complex heterocyclic molecule, showing the spatial arrangement of atoms (C, N, O, H) and the orientation of the fused rings and substituents.</p>
23	 <p>Chemical structure of 2-(methylamino)phenol, showing a benzene ring with a methylamino group (-NHCH<sub>3</sub>) and a hydroxyl group (-OH) in the ortho position.</p>	 <p>3D ball-and-stick model of 2-(methylamino)phenol, showing the spatial arrangement of atoms (C, N, O, H) and the orientation of the methylamino and hydroxyl groups.</p>

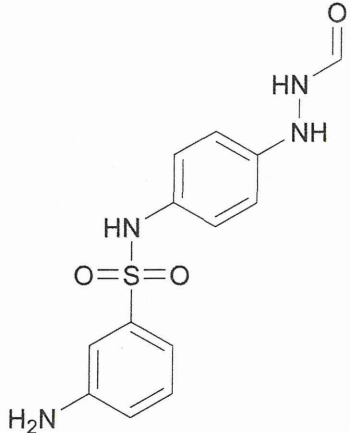
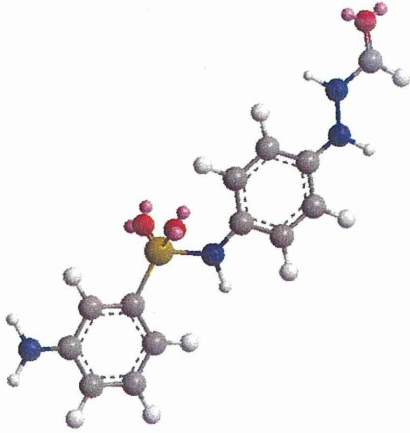
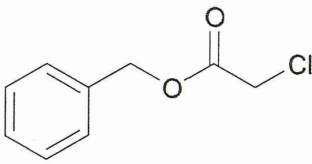
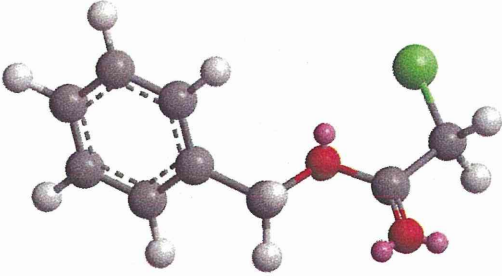
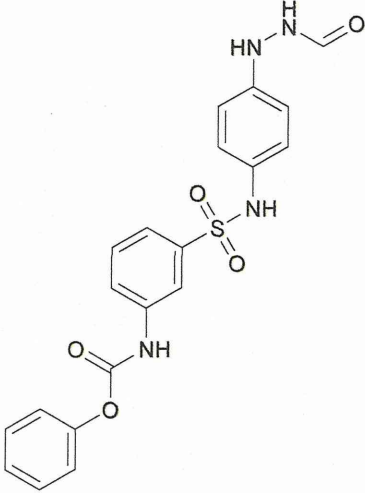
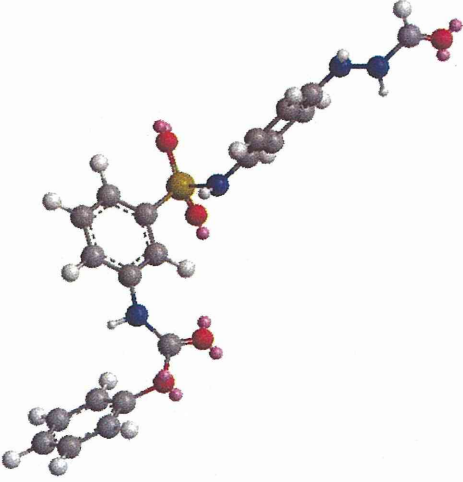
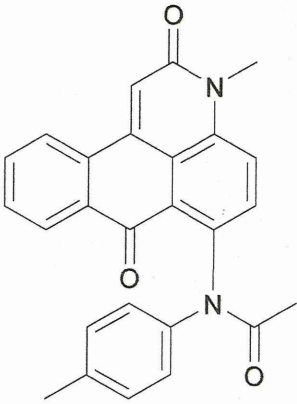
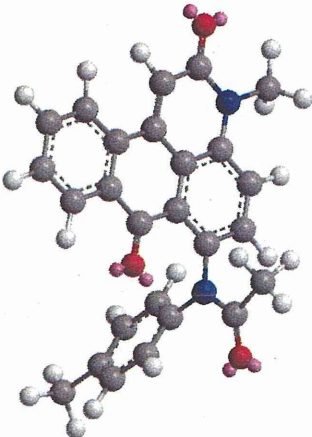
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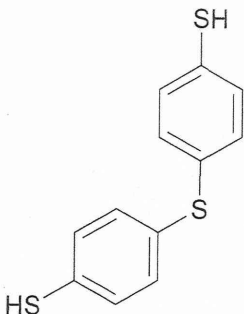
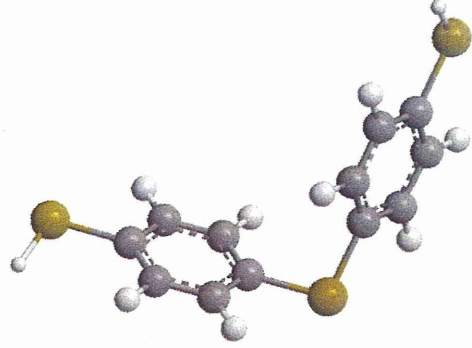
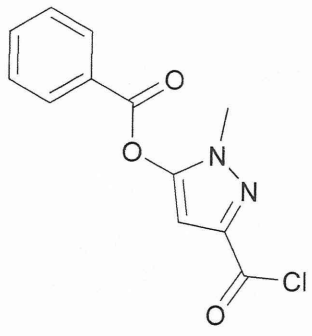
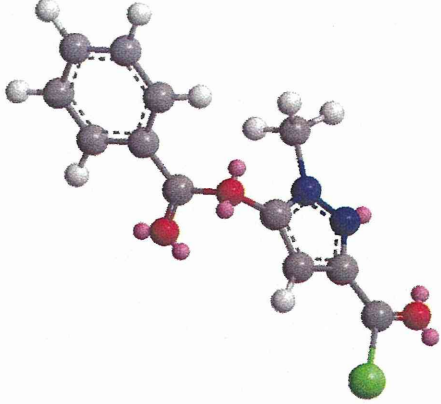
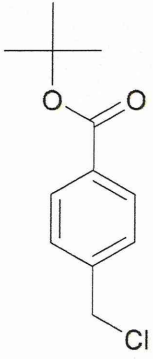
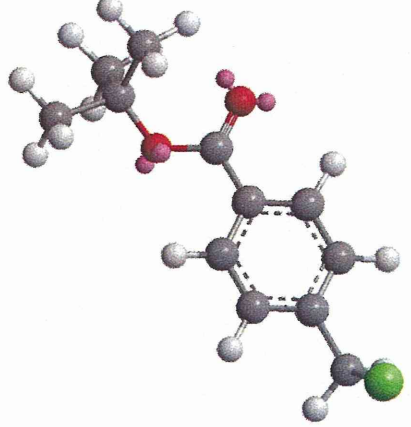
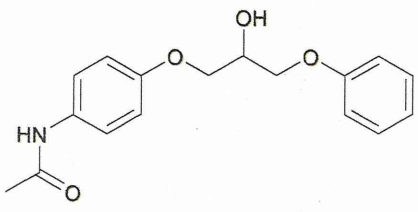
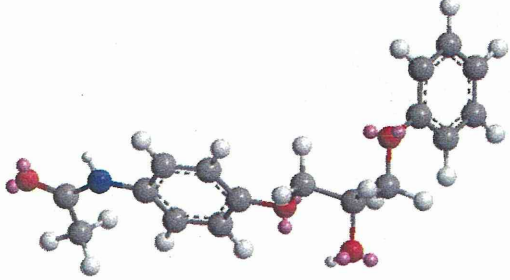
27	 <p>Chemical structure of a complex molecule featuring a benzyl group, a furanose ring, and two dichloroacetyl groups.</p>	 <p>3D ball-and-stick model of the molecule shown in row 27.</p>
28	 <p>Chemical structure of a thiazole derivative with a nitro group, a chlorine atom, a nitrile group, and a propyl nitrile group.</p>	 <p>3D ball-and-stick model of the molecule shown in row 28.</p>
29	 <p>Chemical structure of a cyclohexene ring with a nitrile group.</p>	 <p>3D ball-and-stick model of the molecule shown in row 29.</p>
30	 <p>Chemical structure of a long-chain diamine with nitro groups on the terminal carbons.</p>	 <p>3D ball-and-stick model of the molecule shown in row 30.</p>

31	 <p>Chemical structure of 2-bromo-3-hydroxybutanedioic acid (bromosuccinic acid). It consists of a four-carbon chain with a carboxylic acid group at C1, a hydroxyl group at C3, and a bromine atom at C2.</p>	 <p>3D ball-and-stick model of 2-bromo-3-hydroxybutanedioic acid. Carbon atoms are grey, oxygen atoms are red, hydrogen atoms are white, and the bromine atom is a large red sphere.</p>
32	 <p>Chemical structure of diethyl (benzyl)phosphonate. It features a central phosphorus atom double-bonded to one oxygen and single-bonded to two ethoxy groups and a benzyl group.</p>	 <p>3D ball-and-stick model of diethyl (benzyl)phosphonate. Carbon atoms are grey, oxygen atoms are red, hydrogen atoms are white, phosphorus is purple, and the benzene ring is shown with dashed lines to indicate its planar structure.</p>
33	 <p>Chemical structure of 4-chloro-N-(3-aminophenyl)acetamide. It consists of an acetamide group attached to the nitrogen of a 3-amino-4-chlorophenyl ring.</p>	 <p>3D ball-and-stick model of 4-chloro-N-(3-aminophenyl)acetamide. Carbon atoms are grey, oxygen atoms are red, hydrogen atoms are white, nitrogen atoms are blue, and the chlorine atom is green.</p>
34	 <p>Chemical structure of 1-(4-(2-chloro-5-nitrophenyl)phenyl)pyrrolidine-2-sulfone. It features a pyrrolidine ring with a sulfone group at the 2-position, connected at the 1-position to a 4-(2-chloro-5-nitrophenyl)phenyl group.</p>	 <p>3D ball-and-stick model of 1-(4-(2-chloro-5-nitrophenyl)phenyl)pyrrolidine-2-sulfone. Carbon atoms are grey, oxygen atoms are red, hydrogen atoms are white, nitrogen atoms are blue, sulfur is yellow, and chlorine is green.</p>

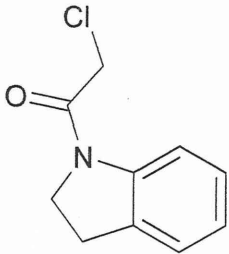
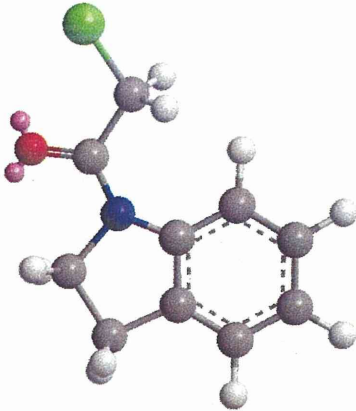
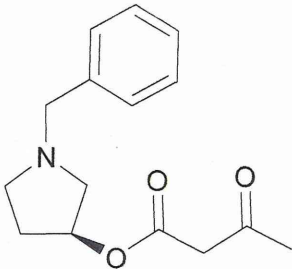
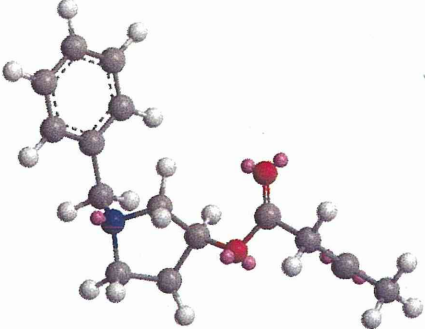
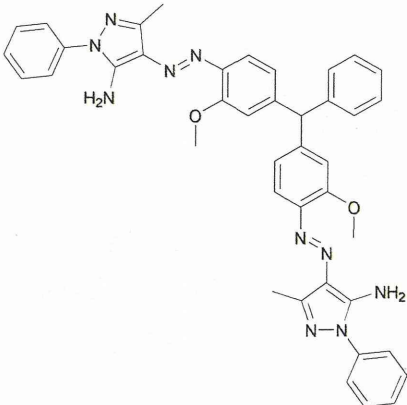
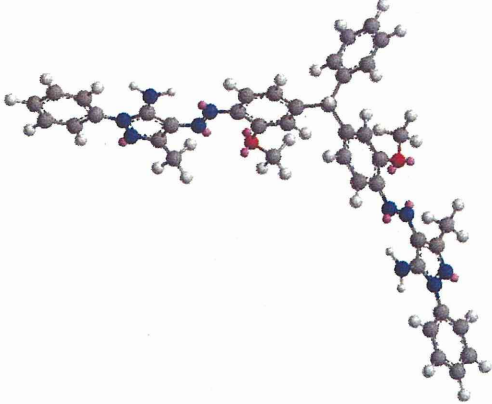
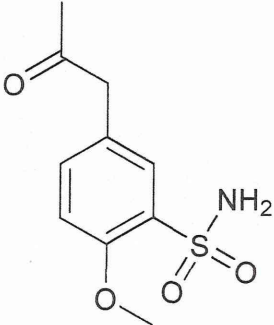
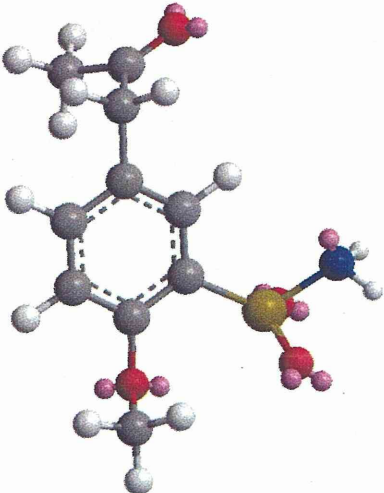


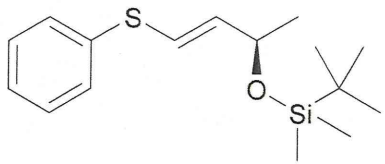
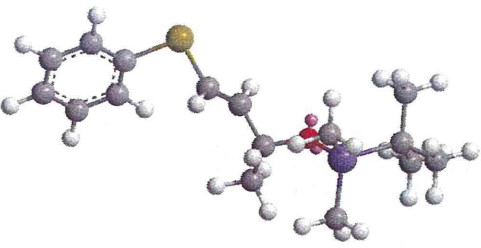
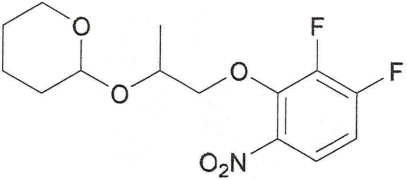
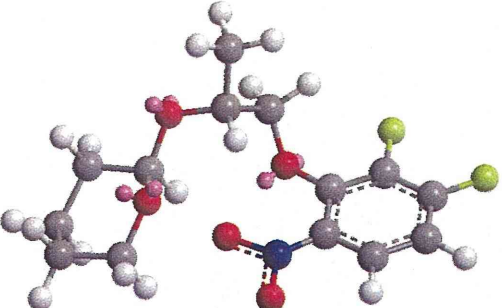
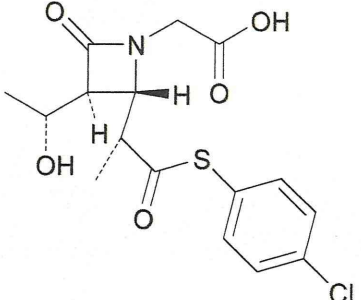
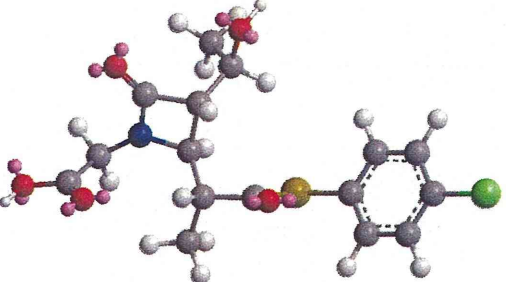
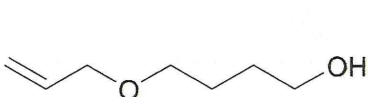
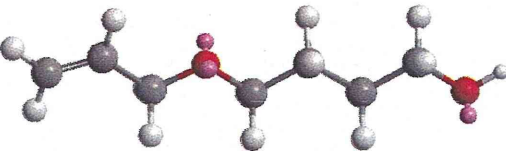
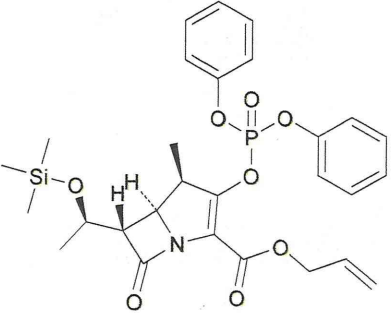
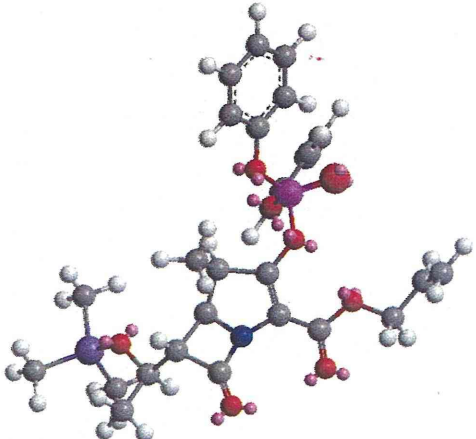
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41	 <chem>CCOC(=O)CCl</chem>	
42	 <chem>COc1ccc(cc1)COC(=O)c2cc(Cl)sc2n3c(=O)[nH]c(=O)c3Cc4ccccc4</chem>	
43	 <chem>CCOC(=O)c1cc(O)c(N)cc1</chem>	

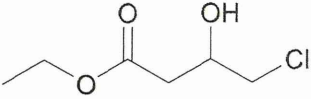
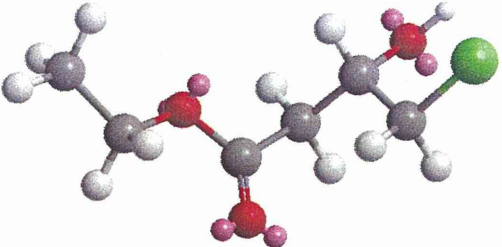
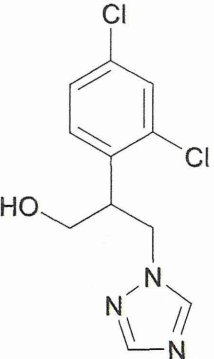
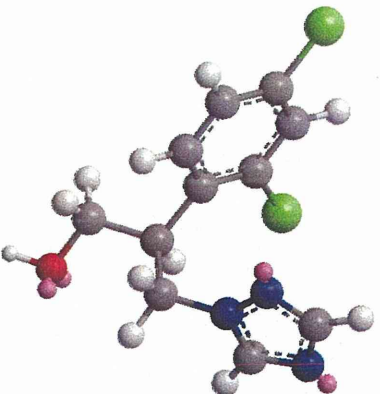
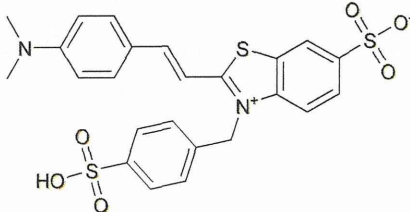
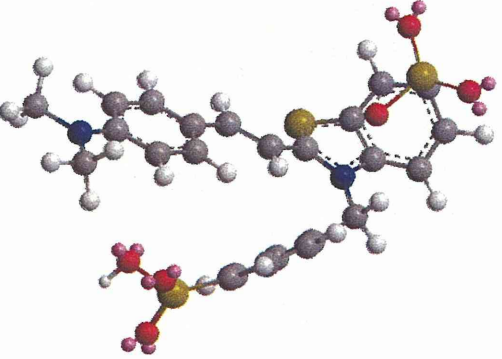
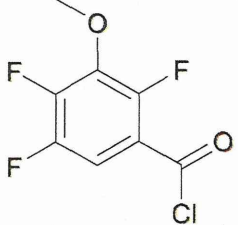
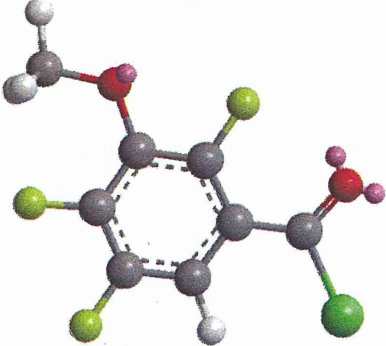
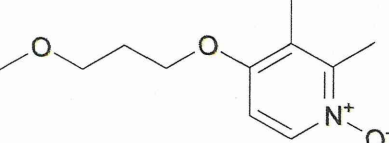
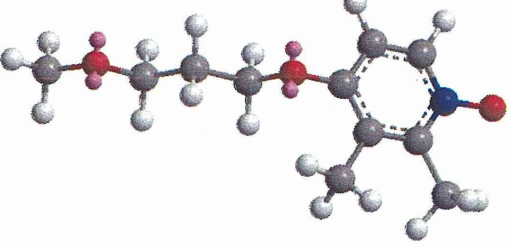
44	 <p>Chemical structure of 4-((4-aminophenyl)hydrazono)sulfonylphenylhydrazide. It features a central benzene ring with a sulfonamide group (-SO<sub>2</sub>NH-) at the top and a hydrazide group (-NHNHCO) at the bottom. The sulfonamide nitrogen is bonded to another benzene ring with an amino group (-NH<sub>2</sub>) at the para position.</p>	 <p>3D ball-and-stick model of 4-((4-aminophenyl)hydrazono)sulfonylphenylhydrazide, showing the spatial arrangement of atoms and the orientation of the sulfonamide and hydrazide groups.</p>
45	 <p>Chemical structure of benzyl chloroacetate, consisting of a benzene ring attached to a methylene group (-CH<sub>2</sub>-), which is further attached to an ester group (-COOCH<sub>2</sub>-) with a chlorine atom on the terminal carbon.</p>	 <p>3D ball-and-stick model of benzyl chloroacetate, highlighting the spatial arrangement of the benzene ring, the methylene group, and the chloroacetate group.</p>
46	 <p>Chemical structure of benzyl 4-((4-aminophenyl)hydrazono)sulfonylphenylcarbamate. It features a central benzene ring with a carbamate group (-NHCOO-) at the top and a sulfonamide group (-SO<sub>2</sub>NH-) at the bottom. The sulfonamide nitrogen is bonded to another benzene ring with an amino group (-NH<sub>2</sub>) at the para position.</p>	 <p>3D ball-and-stick model of benzyl 4-((4-aminophenyl)hydrazono)sulfonylphenylcarbamate, showing the spatial arrangement of the carbamate, sulfonamide, and amino groups.</p>
47	 <p>Chemical structure of 1-methyl-4-(4-methylphenyl)-6-oxo-1,2,3,4-tetrahydroquinoline-3-carboxamide. It features a tetrahydroquinoline core with a methyl group on the nitrogen at position 1, a methyl group on the phenyl ring at position 4, and a carboxamide group (-CONH<sub>2</sub>) at position 3.</p>	 <p>3D ball-and-stick model of 1-methyl-4-(4-methylphenyl)-6-oxo-1,2,3,4-tetrahydroquinoline-3-carboxamide, showing the spatial arrangement of the methyl and carboxamide groups.</p>

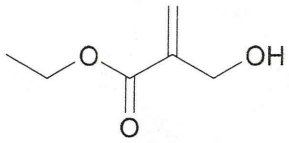
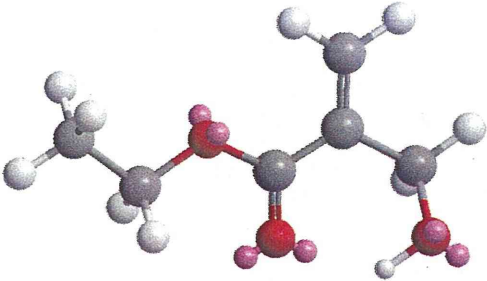
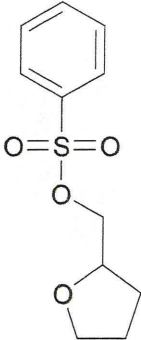
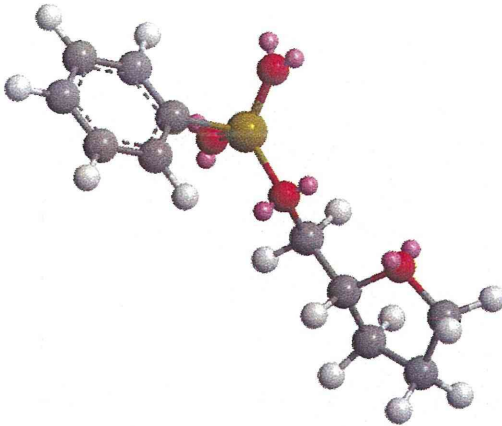
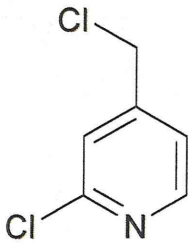
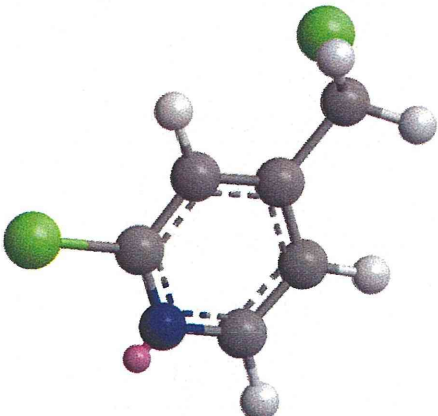
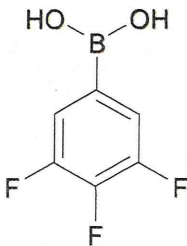
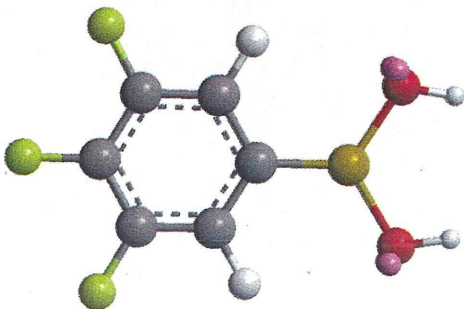
48	 <p>Chemical structure of 1,4-bis(4-mercaptophenyl)disulfane, showing two 4-mercaptophenyl groups connected by a disulfide bridge.</p>	 <p>3D ball-and-stick model of 1,4-bis(4-mercaptophenyl)disulfane, showing the spatial arrangement of atoms and the disulfide bridge.</p>
49	 <p>Chemical structure of 1-(4-chloroacetyl)-5-phenoxymethyl-1H-imidazole, showing a phenoxymethyl group attached to the 5-position of an imidazole ring, which is substituted at the 1-position with a 4-chloroacetyl group.</p>	 <p>3D ball-and-stick model of 1-(4-chloroacetyl)-5-phenoxymethyl-1H-imidazole, showing the spatial arrangement of atoms and the chlorine atom.</p>
50	 <p>Chemical structure of 4-(chloromethyl)benzoic acid tert-butyl ester, showing a tert-butyl ester group attached to a benzene ring, which is substituted at the para position with a chloromethyl group.</p>	 <p>3D ball-and-stick model of 4-(chloromethyl)benzoic acid tert-butyl ester, showing the spatial arrangement of atoms and the chlorine atom.</p>
51	 <p>Chemical structure of 1-(4-(benzyloxy)phenyl)ethan-1-one, showing a benzoyl group attached to a benzene ring, which is substituted at the para position with a benzyloxy group.</p>	 <p>3D ball-and-stick model of 1-(4-(benzyloxy)phenyl)ethan-1-one, showing the spatial arrangement of atoms and the benzyloxy group.</p>

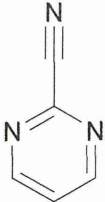
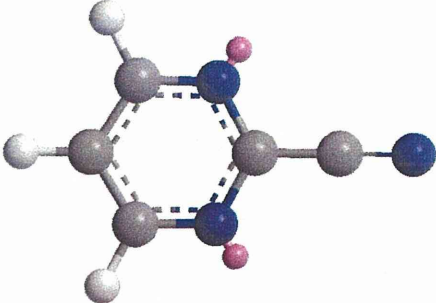
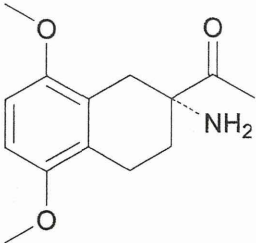
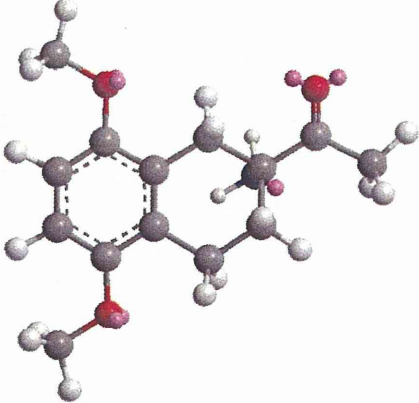
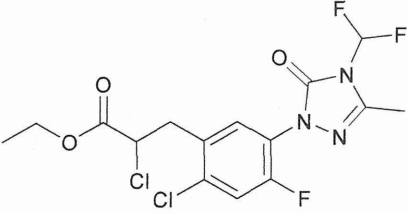
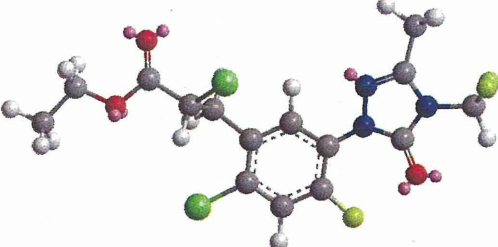
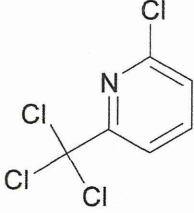
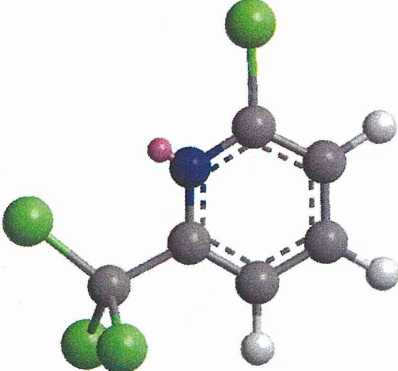
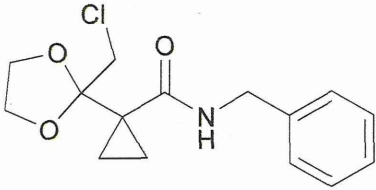
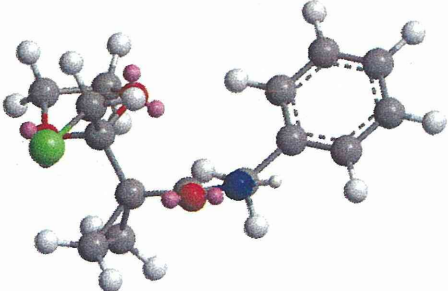


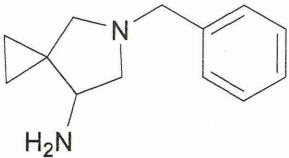
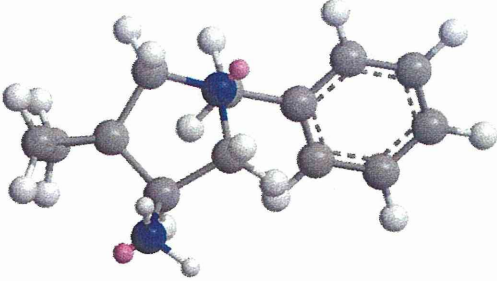
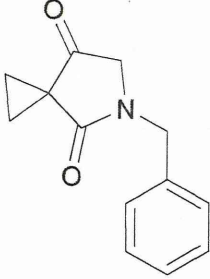
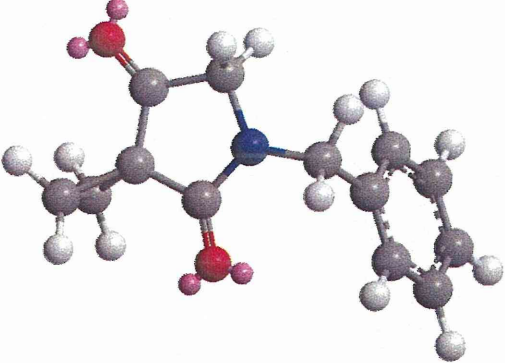
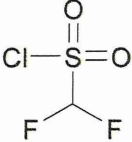
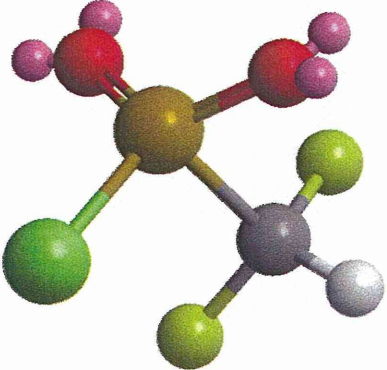
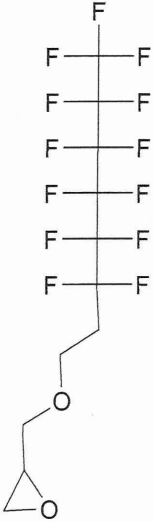
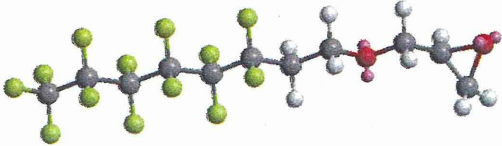
52	 <p>Chemical structure of 2-(chloromethyl)indoline, showing a five-membered nitrogen-containing ring fused to a benzene ring, with a chloromethyl group attached to the nitrogen atom.</p>	 <p>3D ball-and-stick model of 2-(chloromethyl)indoline, showing the spatial arrangement of atoms (carbon in grey, nitrogen in blue, oxygen in red, and chlorine in green).</p>
53	 <p>Chemical structure of 1-(4-phenylphenyl)pyrrolidine-2-yl acetate, showing a pyrrolidine ring with a 4-phenylphenyl group on the nitrogen and an acetate group on the 2-position.</p>	 <p>3D ball-and-stick model of 1-(4-phenylphenyl)pyrrolidine-2-yl acetate, showing the spatial arrangement of atoms.</p>
54	 <p>Chemical structure of a complex diazo compound, featuring two benzimidazole rings connected by a diazo group, with various substituents including a phenyl group, a methyl group, an amino group, and a methoxy group.</p>	 <p>3D ball-and-stick model of the complex diazo compound, showing the spatial arrangement of atoms.</p>
55	 <p>Chemical structure of 4-(acetamido)anisole, showing a benzene ring with a methoxy group and an acetamido group in para positions.</p>	 <p>3D ball-and-stick model of 4-(acetamido)anisole, showing the spatial arrangement of atoms.</p>

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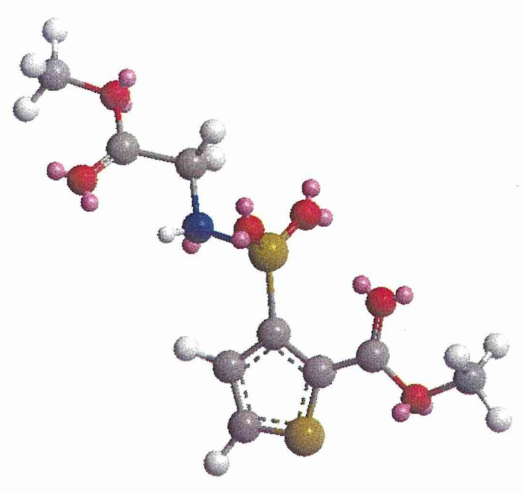
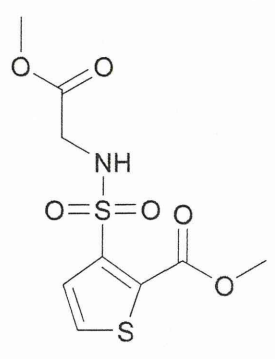
61	 <chem>CCOC(=O)C(O)CCl</chem>	
62	 <chem>OCCc1cc(Cl)cc(Cl)c1</chem>	
63	 <chem>CN(C)c1ccc(cc1)/C=C/S2=NC(=S)C3=CC=C(S(=O)(=O)O)C=C23</chem>	
64	 <chem>COc1c(F)c(F)c(C=O)c(Cl)c1F</chem>	
65	 <chem>COCCCOc1cc(C)c([N+](=O)[O-])cc1</chem>	

66	 <chem>CCOC(=O)C=C</chem>	
67	 <chem>C1CCOC1S(=O)(=O)N</chem>	
68	 <chem>ClC1=CC=C(N1)Cl</chem>	
69	 <chem>O[B(O)](O)c1cc(F)c(F)c1</chem>	

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研究成果の刊行に関する一覧表

発表者氏名	論文タイトル名	発表誌名	巻	ページ	出版年
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H. Yamashita, M. Oba, T. Misawa, M. Tanaka, T. Hattori, M. Naito, M. Kurihara, and Y. Demizu	A Helix-Stabilized Cell-Penetrating Peptide as an Intracellular Delivery Tool	<i>ChemBioChem</i>	17	137-140	2016
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Y. Demizu, H. Yamashita, T. Misawa, M. Doi, M. Tanaka, M. Kurihara	Effects of D-Leu residues on the helical secondary structures of L-Leu-based nonapeptides	<i>Chem. Pharm. Bull.</i>	63	218-224	2015
H. Yamashita, Y. Demizu, T. Misawa, T. Shoda, M. Kurihara	Synthesis of a bis-cationic, $\alpha$ -disubstituted amino acid (9-amino-bispidine-9-carboxylic acid) and its effects on the conformational properties of peptides	<i>Tetrahedron</i>	71	2241-2245	2015



