

MOLECULAR STRUCTURE OF ACRYLAMIDE-BASED MONOMER

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Keywords: Acrylamide, GX.

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We studied the crystal and molecular structures of acrylamide and calcium chloride monomer[1,2] and showed the exocyclic active sites of the molecules. They tend to form various intermolecular hydrogen bonds. Continuing the research, calcium tetraacrylamide was synthesized, chlorine anion was precipitated with silver nitrate in the obtained complex compound, synthesis work was carried out and its structure was studied. Continuing the research, calcium tetraacrylamide was synthesized, chlorine anion was precipitated in the presence of silver nitrate in the obtained complex compound, synthesis works were carried out and its structure was studied. The reaction takes place at the expense of oxygen contained in acrylamide, and zinc forms a complex in the internal sephira [3]. It is known that the high biological activity of acrylamide derivatives arouses great interest in them, including fungicides, herbicides, and growth regulators [4]. Continuing the research, calcium tetraacrylamide was synthesized, chlorine anion was precipitated in the presence of silver nitrate in the obtained complex compound, synthesis works were carried out and its structure was studied. The reaction takes place at the expense of oxygen contained in acrylamide, and zinc forms a complex in the internal sephira [3]. It is known that the high biological activity of acrylamide derivatives arouses great interest in them, including fungicides, herbicides, and growth regulators [4].

X-ray experimental experiment. The unit cell parameters of the crystals were determined on a CCD Xcalibur Ruby multichannel diffractometer using Su K radiation (T=300 K, graphite monochromator). In this diffractometer, a set of three-dimensional reflections from the corresponding crystals is obtained [5].

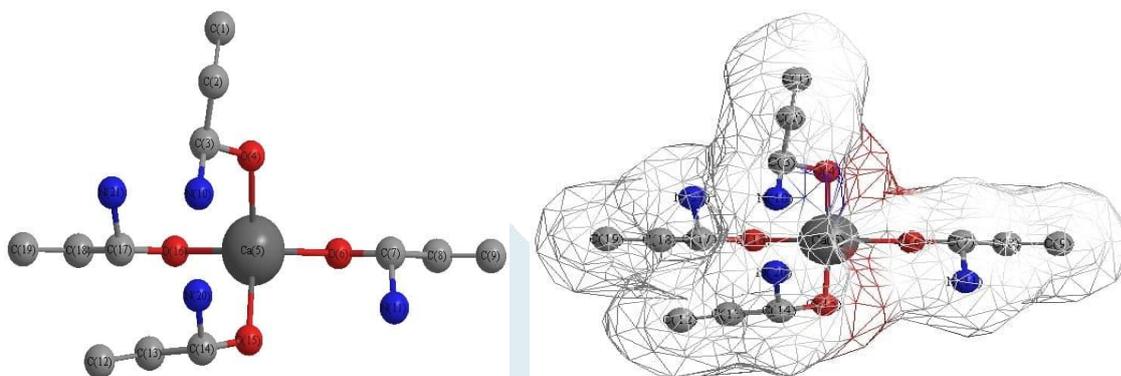


Figure 1. Distribution and spatial arrangement of charges in tetraacrylamide calcium molecule.

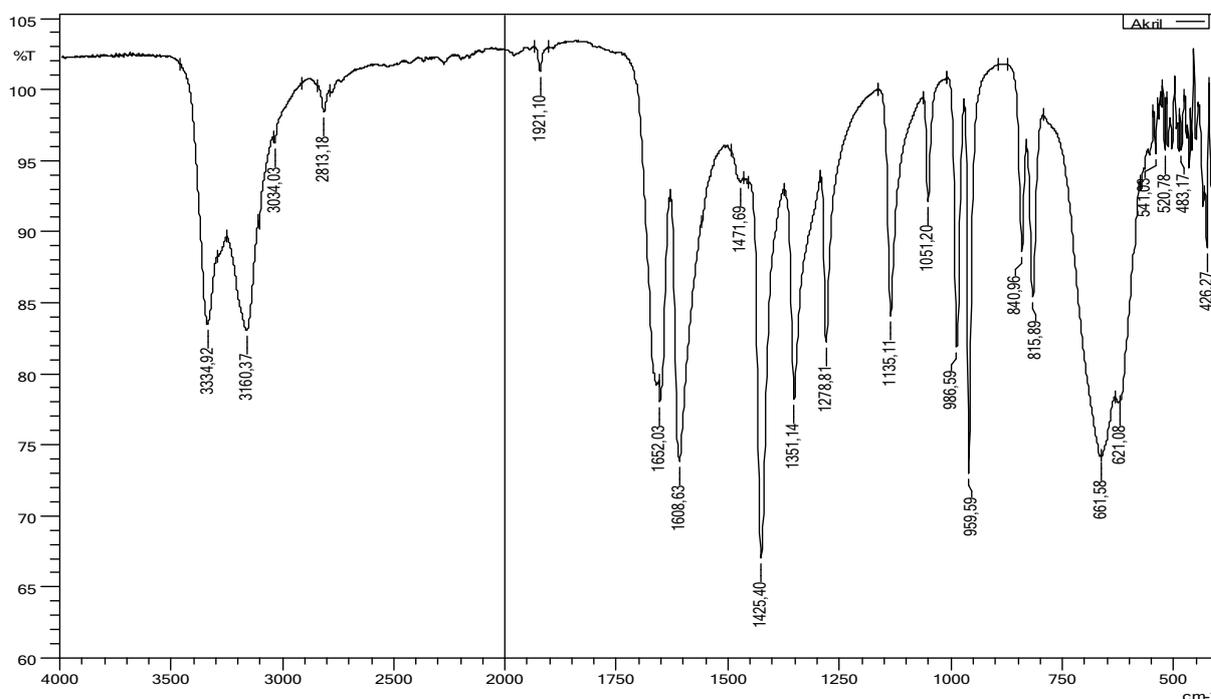


Figure 2. IR spectrum of tetraacrylamide manganese

The following absorption lines were shown in the IR-spectrum of TM: in the region of 1652 cm-1 strong vibration frequencies belonging to the S=O group are observed, and in the region of 3334.92 cm-1 it is possible to observe the presence of valence vibrations belonging to the S-N group.

Used literature

1. J. M. Ashurov, N. S. Mukhamedov, B. Tashkhodjaev, B. T. Ibragimov. - JSX No. 6, S. 1201-1207.
2. J. M. Ashurov, N. S. Mukhamedov, B. Tashkhodjaev, B. T. Ibragimov, JSX (2014 v pech.).
3. Dushamov D.A., Yakubov U.Kh., Aflyatunova R.G., Jonkhojaeva F.B., Aliev N.A. // Uzb. chem. Journal. -2003. - #6. -S.7.
4. Pat. SShA 3050526; RJX. -1964. -4N380P.
5. Pat. England 1379754. RJX. -1975. -23. 0407P
6. Sheldrick G.M. Program for Empirical Absorption Correction of Area Detector Data. - Goettingen: University of Goettingen, 1996