



1,5-ALMASHINGAN NAFTOL HOSILALARINING KADMIY (II) KATIONI BILAN ARALASH LIGANDLI KOMPLEKS BIRIKMASI SINTEZI

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Termiz davlat universiteti o'qituvchi.

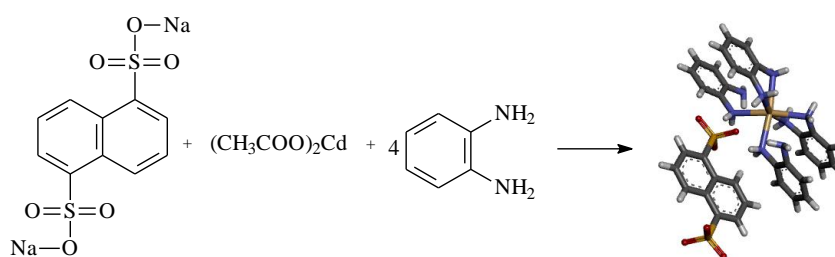
²Termiz davlat universiteti tayanch doktoranti

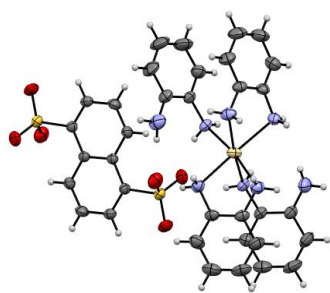
³Termiz davlat universiteti stajyor tadqiqotchisi

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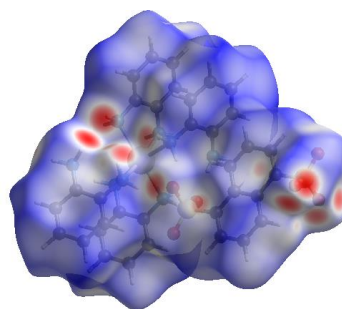
Naftalin xalqasi saqlagan metallokomplekslar va ularning xosilaridan tibbiyotda preparatlar sintez qilishda hamda bir necha turdagi dori vositalarini ishlab chiqarishda, ushbu turdagi komplekslar eritmalarining har xil konsentratsiyali eritmaları qo'llaniladi [1]. Bundan tashqari kimyo laboratoriyalarida turli xil moddalarni sintez qilishda va ilmiy-tadqiqot ishlarini olib borishda ham foydalanish mumkin [2]. Sanoatda va ishlab chiqarish korxonalarida, maxsulotlar ishlab chiqarish jarayonlarida naftalindisulfokislota hosilalaridan oraliq maxsulotlar sifatida foydalanilmoqda [4].

Ushbu ishda naftalindisulfokislota ning kadmiy (II) asetat bilan ta'sirlashishi, fenilendiamin ishtirokidagi 1:1:1 mol nisbatdagi komponentlarining tegishli miqdordagi suvdagi va etanoldagi eritmalaridan foydalanildi. So'ngra 25-30 minut davomida 40-50°C harorat oralig'ida magnitli aralashtirgich yordamida aralashtirildi va xona haroratida bug'latish uchun qoldirildi, Natijada 15 kundan so'ng, idish tubida, rangsiz kristallar hosil bo'lgani kuzatildi. Reaksiya tenglamasi quyidagicha.

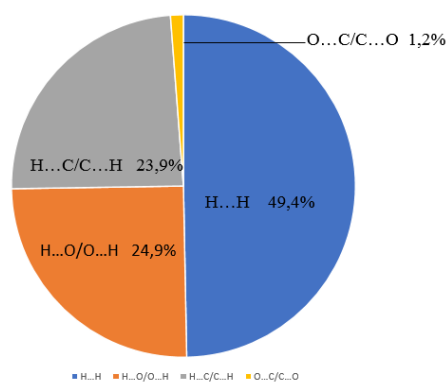




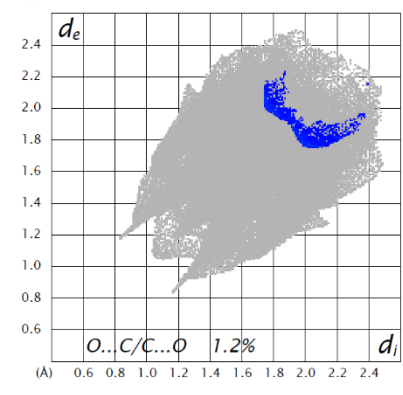
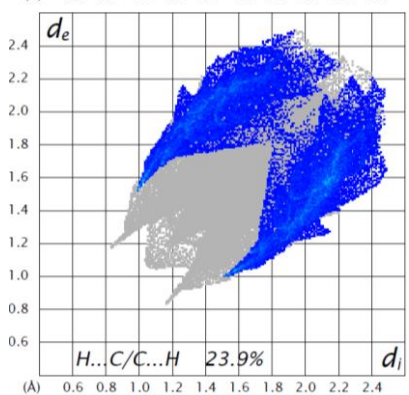
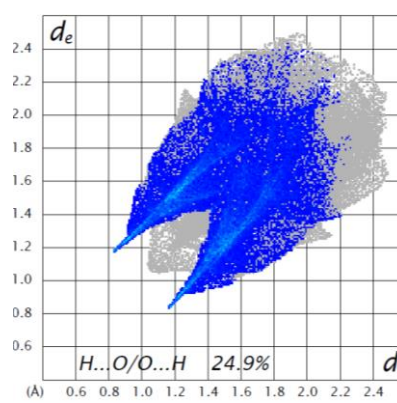
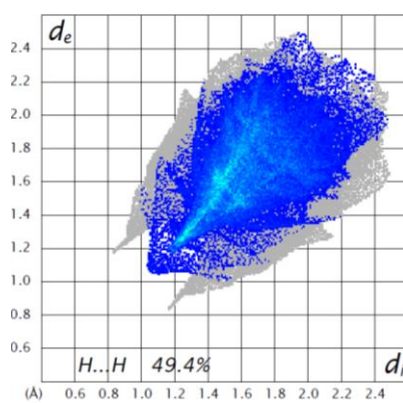
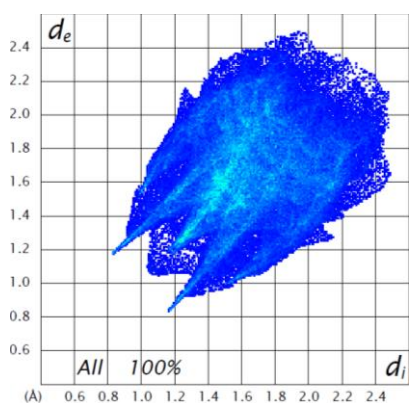
a



b



c



d



3-Rasm: naftalindisulfokislotaning kadmiy (II) asetat va fenilendiamin bilan hosil qilgan metallokompleksi monokristalining molekulyar tuzilishi (a), Xirshfeld sirtlari (b), Xirshfeld barmoq izi diagrammasi (c), 2D Xirshfeld barmoq izi grafigi (d)

3-rasmdagi “b” rasmda naftalindisulfokislotaning kadmiy (II) asetat va fenilendiamin bilan hosil qilgan metallokompleksining xirshfeld sirtlari tasvirlangan, qizil rang eng yaqin ta’sirlashuvlarni va ko‘k rang eng uzoq ta’sirlashuvlarni ifodalaydi, “c” xirshfeld barmoq izi diagrammasi keltirilgan, “d” rasmda kristall qadoqlashning shakllanishiga individual o‘zaro tasirlarning hissasini ko‘rsatuvchi de va di funksiyalari yordamida olingan ikki o‘lchamli barmoq izining grafiklari keltirilgan. Shunday qilib xirshfeld sirtini tahlil qilish natijasida quyidagi ta’sirlashuvlar aniqlandi: H...H (49,4%), H...O/O...H (24,9%), H...C/C...H (23,9%), O...C/C...O (1,2%) ta’sirlashuvlar kristall qadoqlashning shakllanishiga asosiy hissa qo‘shadi. Xirshfeld sirt tahlilidan ko‘rinib turibdiki o‘zaro tasirlarning asosiy qismini H...H (49,4%), H...O/O...H (24,9%), H...C/C...H (23,9%), tashkil qiladi.

Adabiyotlar.

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