

Supplementary Material

Potassium fluoride catalysed multicomponent approach to medicinally privileged 5-[3-hydroxy-6-(hydroxymethyl)-4-oxo-4H-pyran-2-yl] substituted chromeno[2,3-*b*]pyridine scaffold

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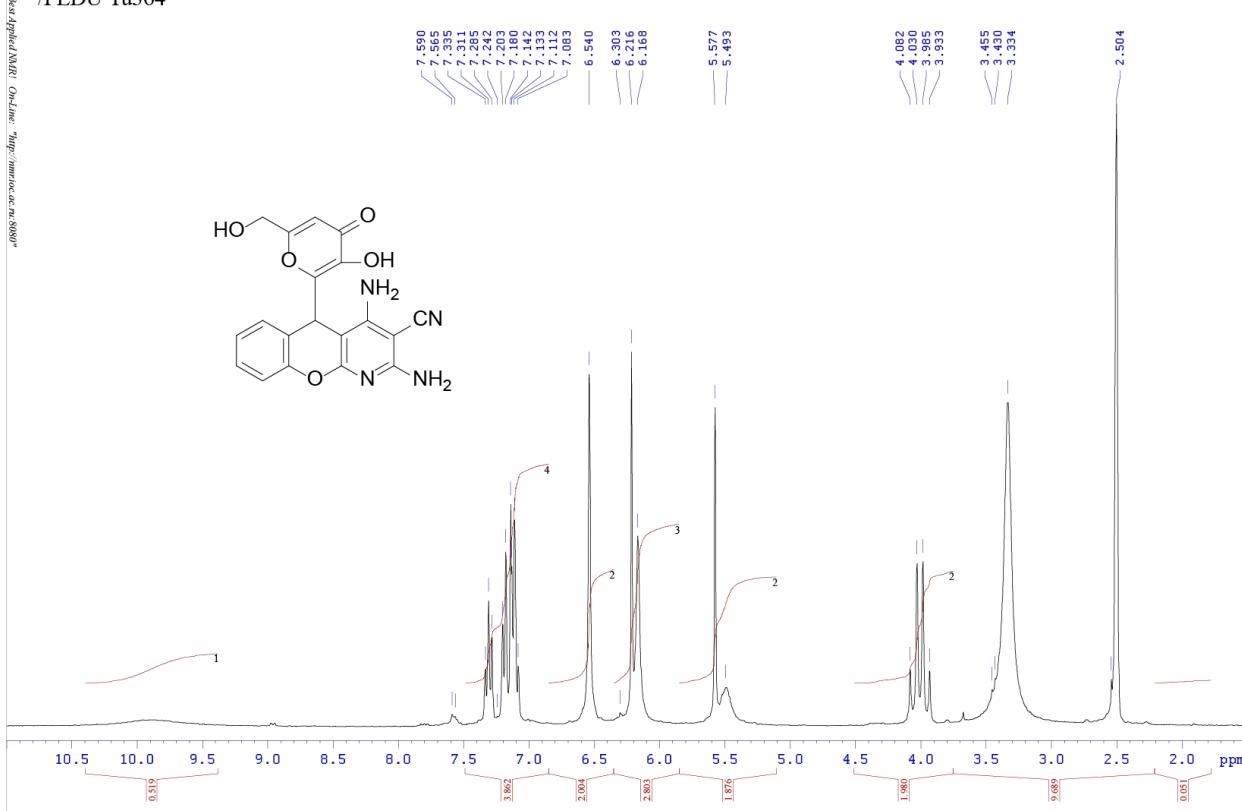
Table of Contents

¹ H and ¹³ C NMR spectra of novel 5-[3-hydroxy-6-(hydroxymethyl)-4H-pyran-2-yl] substituted chromeno[2,3- <i>b</i>]pyridines 2a-j	S2
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2,4-Diamino-5-(3-hydroxy-6-(hydroxymethyl)-4-oxo-4H-pyran-2-yl)-5H-chromeno[2,3-*b*]-pyridine-3-carbonitrile (2a)

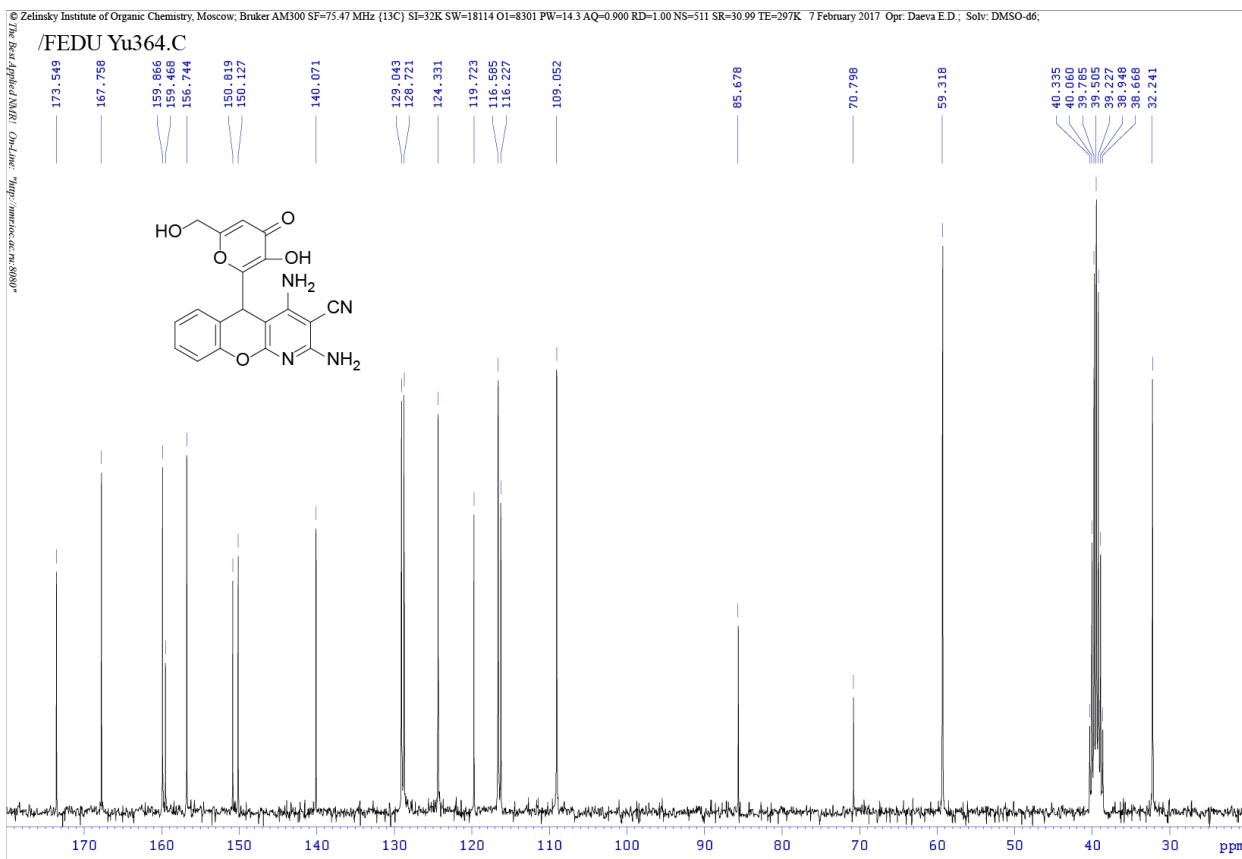
© Zelinsky Institute of Organic Chemistry, Moscow, Bruker AM300 SF=300.13 MHz (1H) SI=16K SW=7500 O1=2800 PW=9.0 AQ=1.082 RD=3.00 NS=1 SR=2.34 TE=304K 26 December 2016 Opr. Struchkova M.I.; Solv: DMSO-d6.

/FEDU Yu364



© Zelinsky Institute of Organic Chemistry, Moscow, Bruker AM300 SF=75.47 MHz (13C) SI=32K SW=18114 O1=8301 PW=14.3 AQ=0.900 RD=1.00 NS=511 SR=30.99 TE=297K 7 February 2017 Opr. Daeva È.D.; Solv: DMSO-d6.

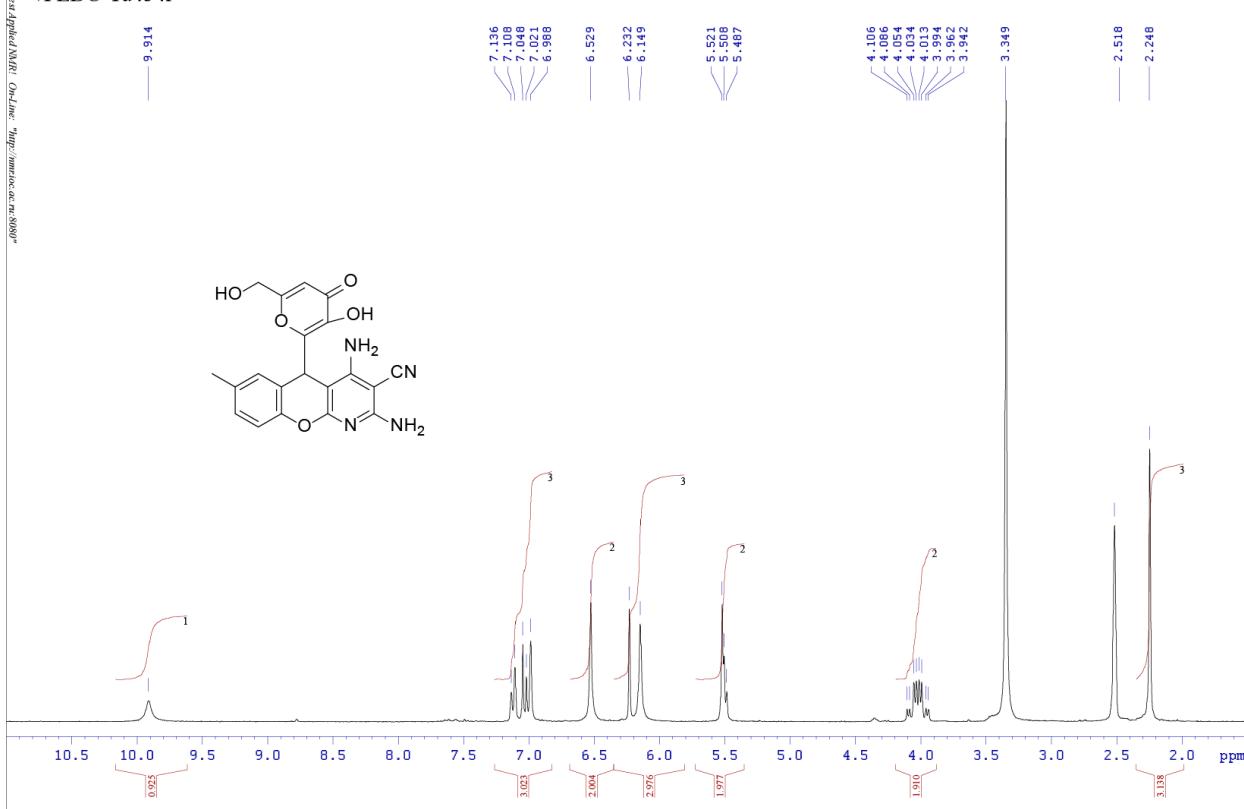
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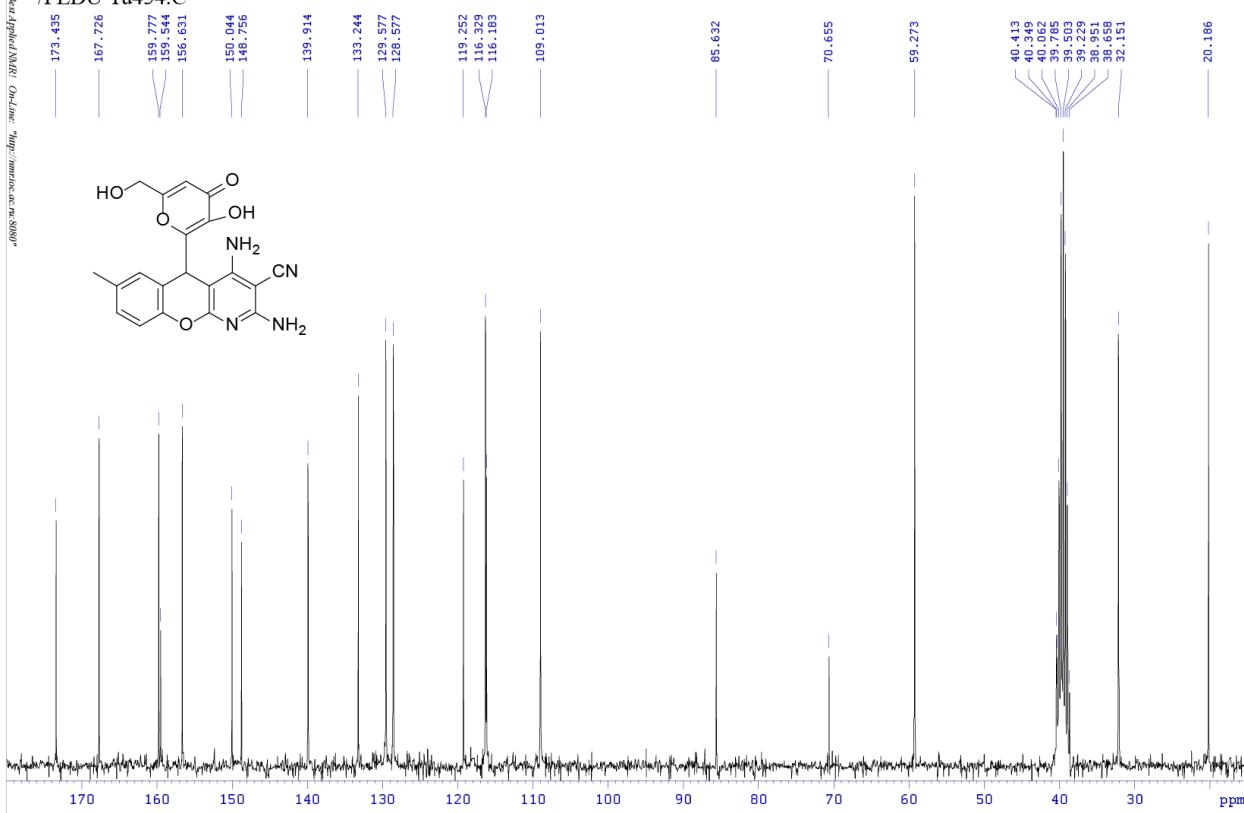
2,4-Diamino-5-(3-hydroxy-6-(hydroxymethyl)-4-oxo-4H-pyran-2-yl)-7-methyl-5H-chromeno[2,3-*b*]pyridine-3-carbonitrile (2b).

© Zelinsky Institute of Organic Chemistry, Moscow, Bruker AM300 SF=300.13 MHz (1H) SI=32K SW=6002 O1=2401 PW=9.0 AQ=1.352 RD=1.00 NS=1 SR=4.07 TE=300K 17 October 2017 Opr: Daeva E.D.; Solv: DMSO-d6.

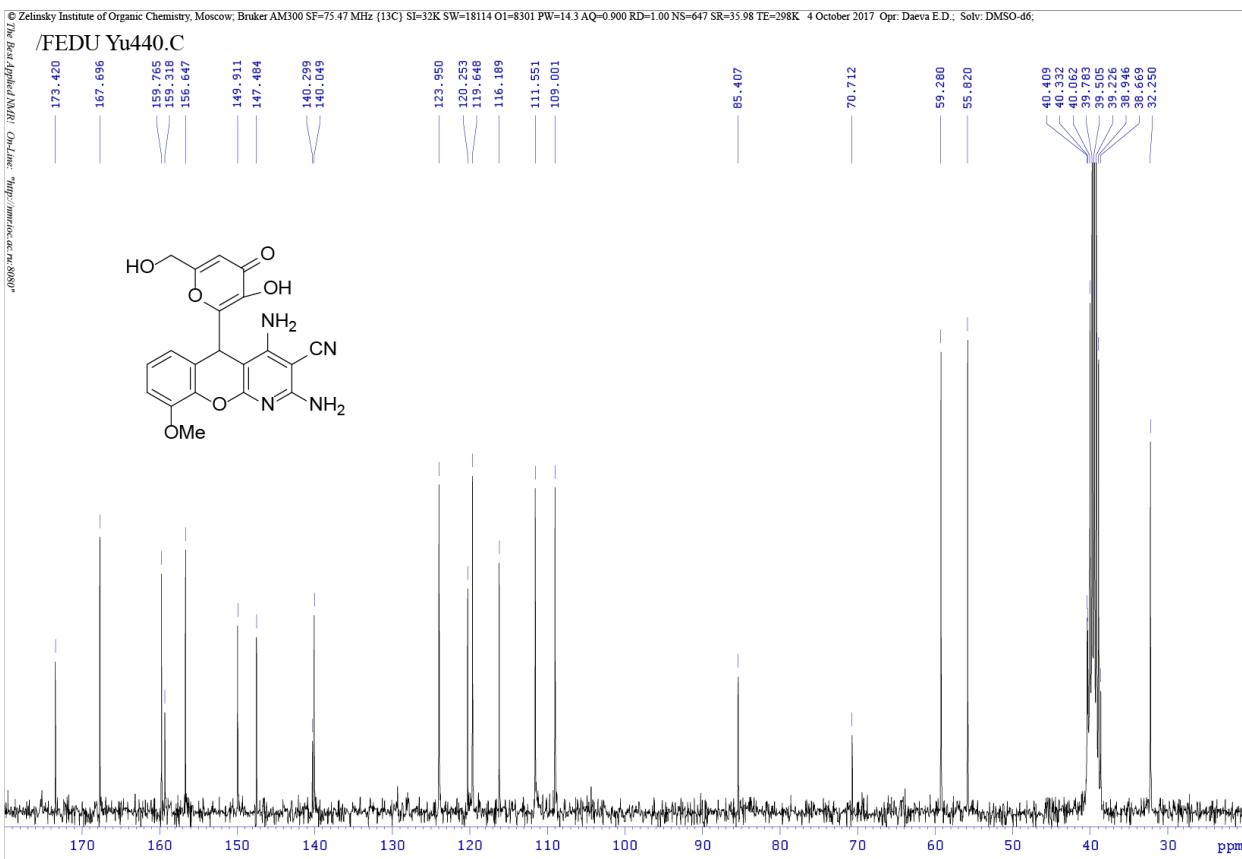
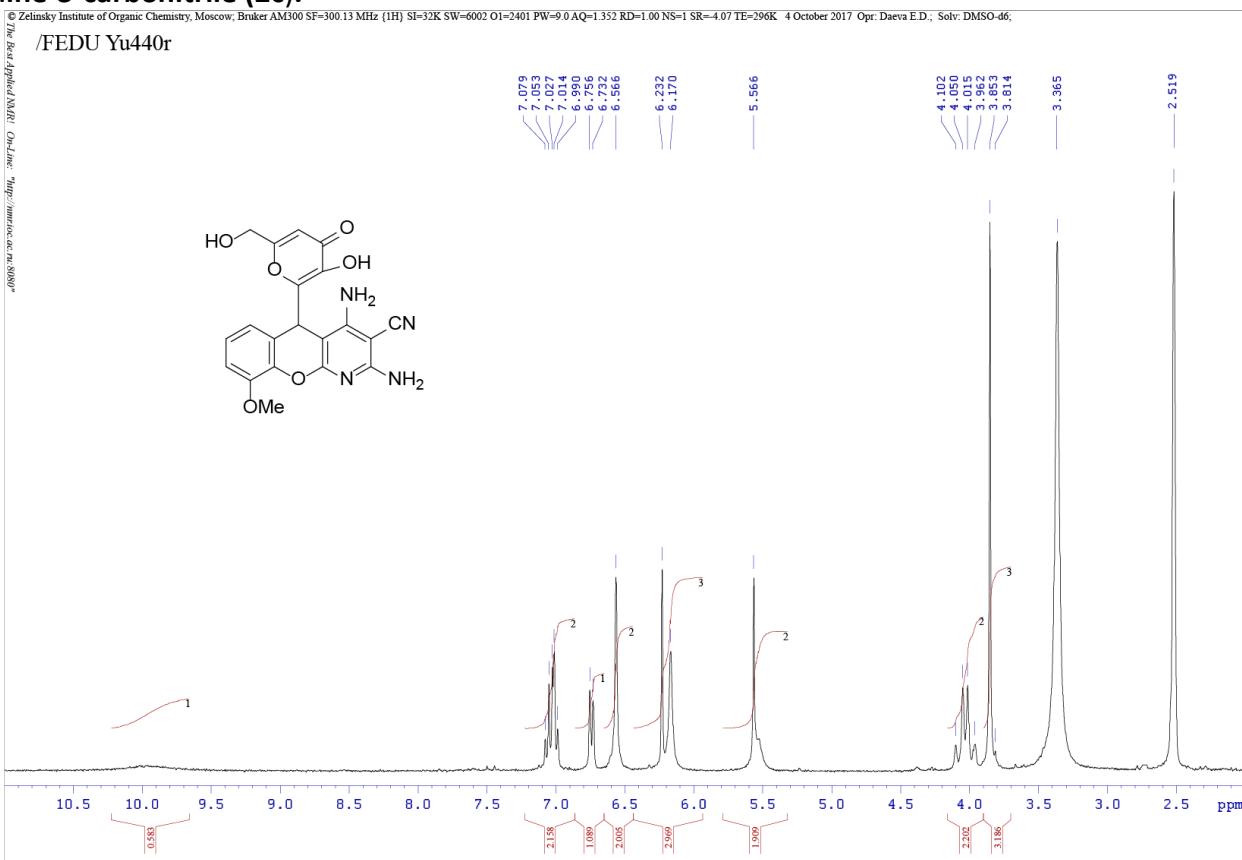
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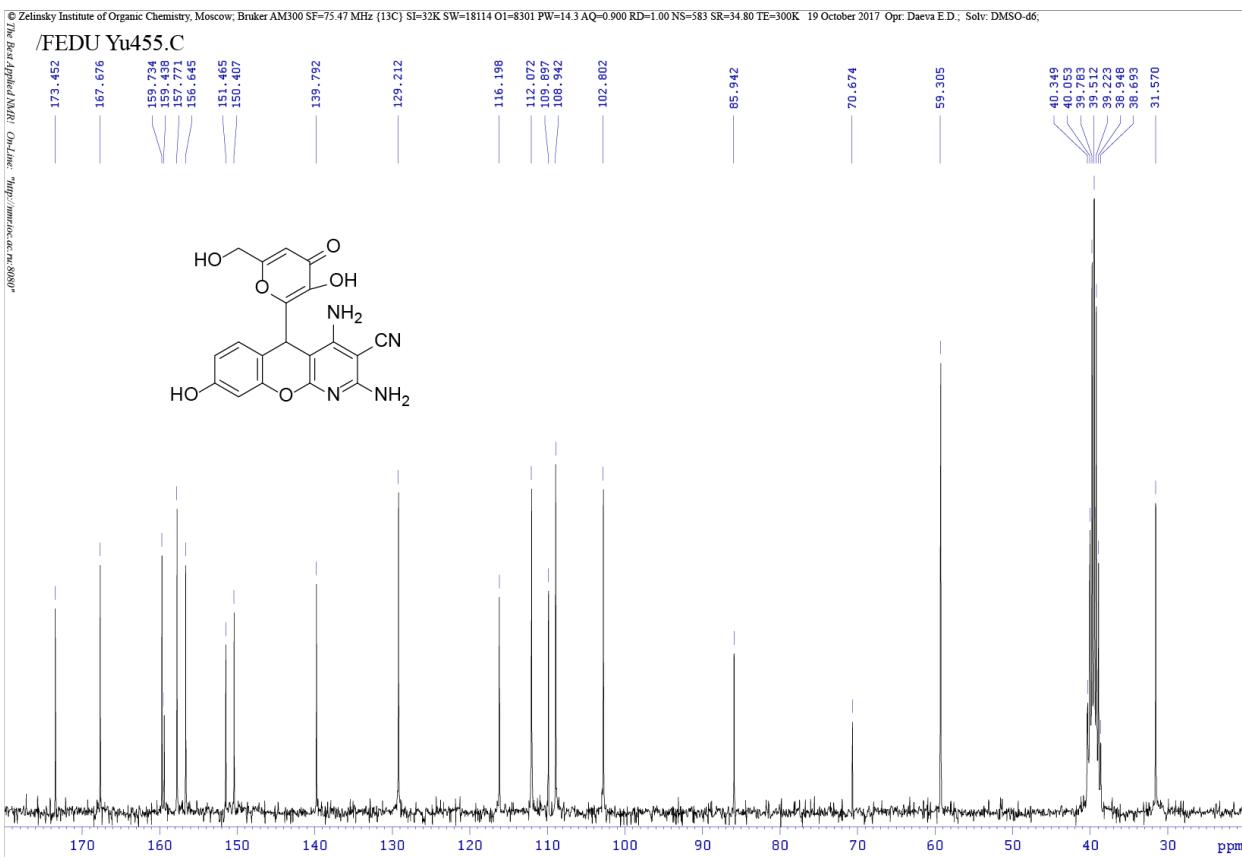
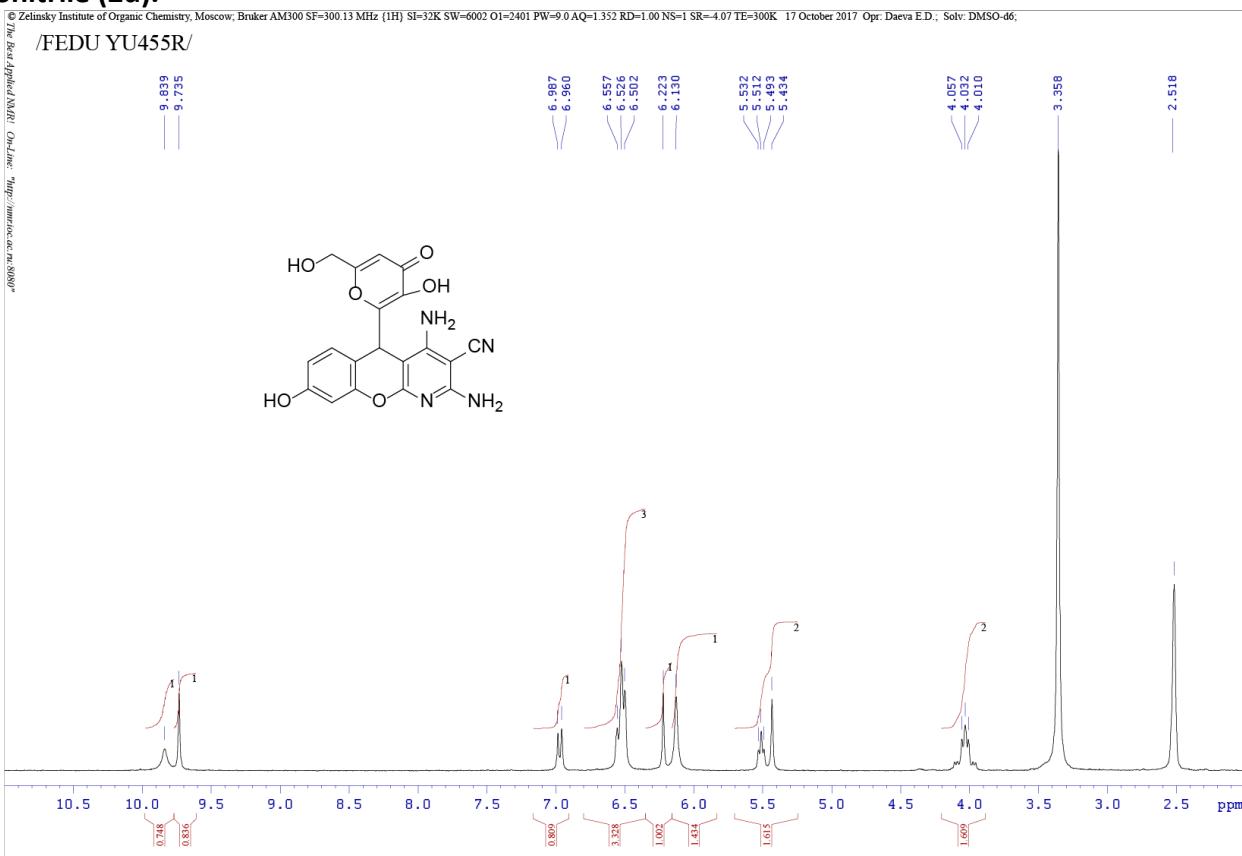
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2,4-Diamino-5-(3-hydroxy-6-(hydroxymethyl)-4-oxo-4H-pyran-2-yl)-9-methoxy-5H-chromeno[2,3-*b*]pyridine-3-carbonitrile (2c).



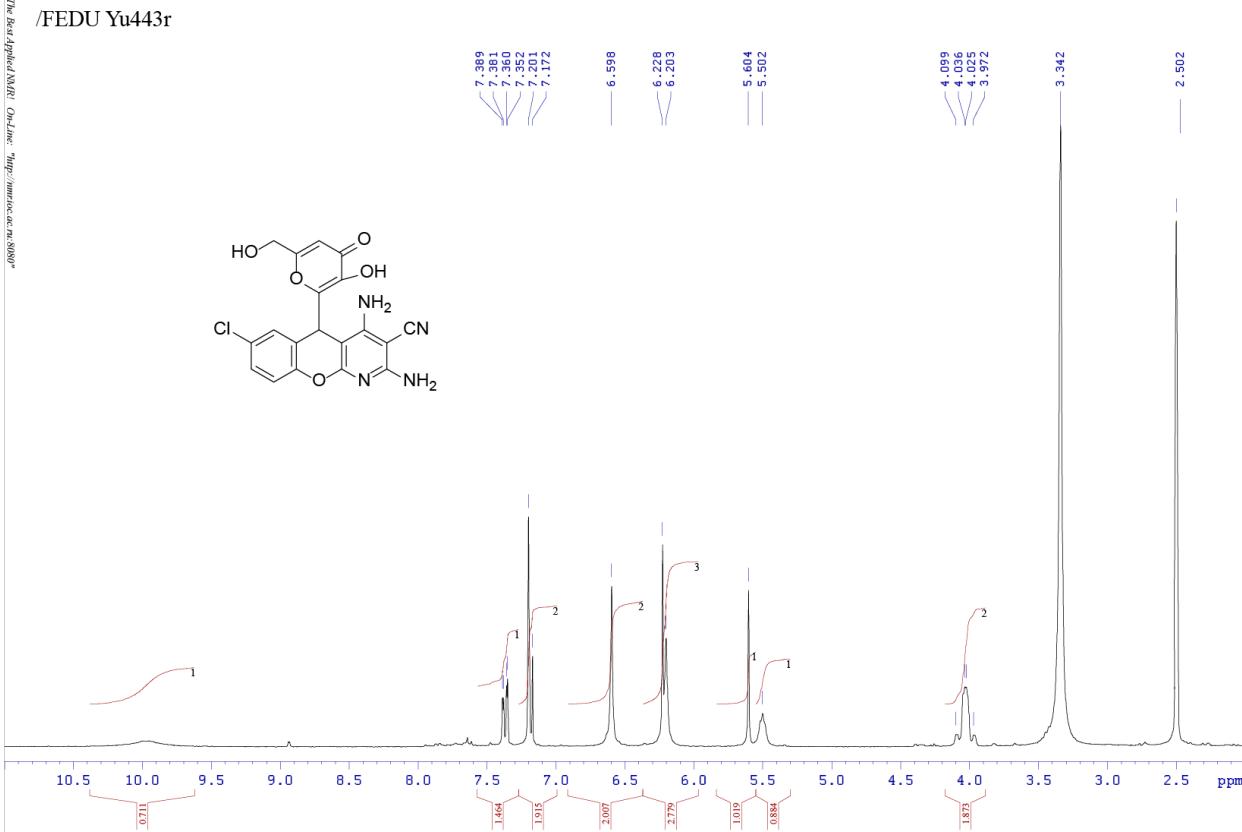
2,4-Diamino-8-hydroxy-5-(3-hydroxy-6-(hydroxymethyl)-4-oxo-4H-pyran-2-yl)-5H-chromeno[2,3-*b*]pyridine-3-carbonitrile (2d).



2,4-Diamino-7-chloro-5-(3-hydroxy-6-(hydroxymethyl)-4-oxo-4H-pyran-2-yl)-5H-chromeno[2,3-*b*]pyridine-3-carbonitrile (2e).

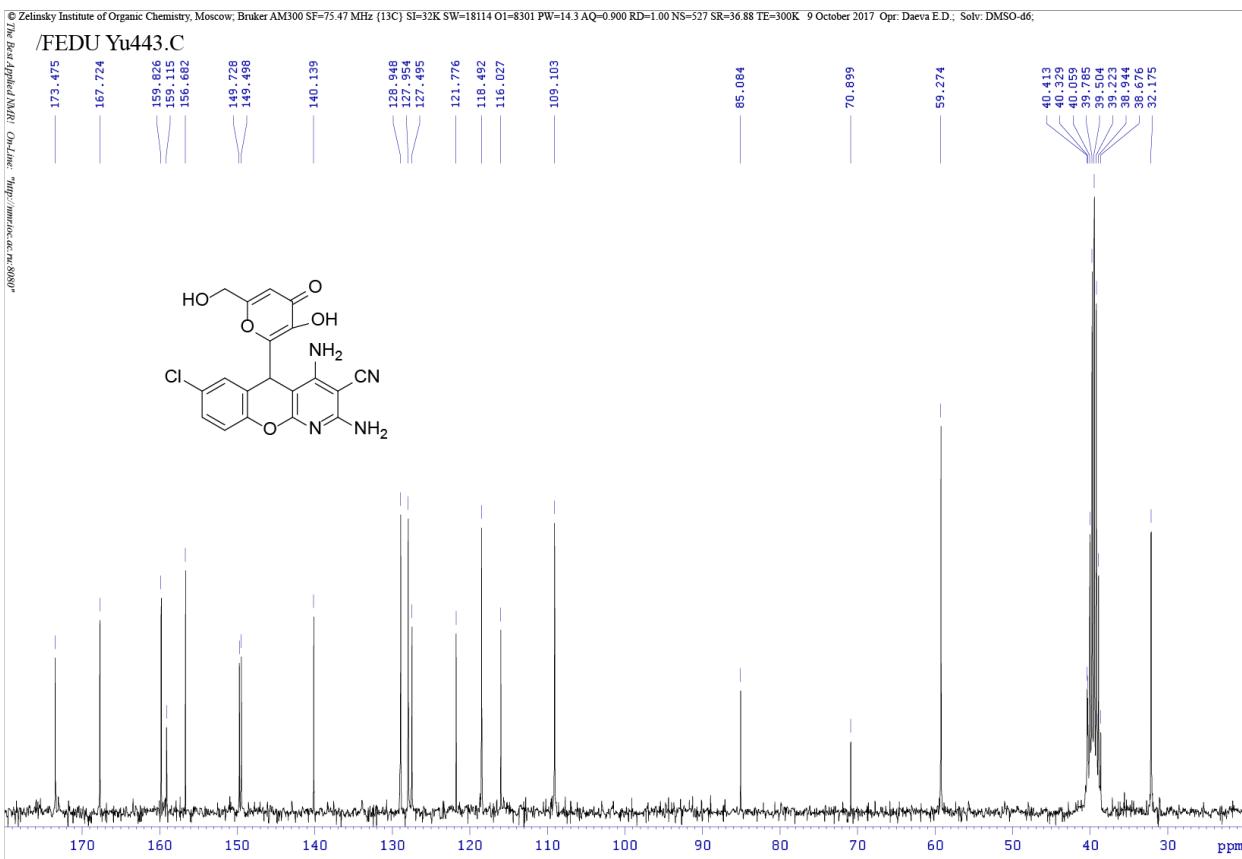
© Zelinsky Institute of Organic Chemistry, Moscow, Bruker AM300 SF=300.13 MHz (1H) SI=32K SW=9014 O1=2401 PW=9.0 AQ=0.901 RD=1.00 NS=1 SR=2.96 TE=298K 6 October 2017 Opr: Strukova M.I.; Solv: DMSO-d6;

/FEDU Yu443r



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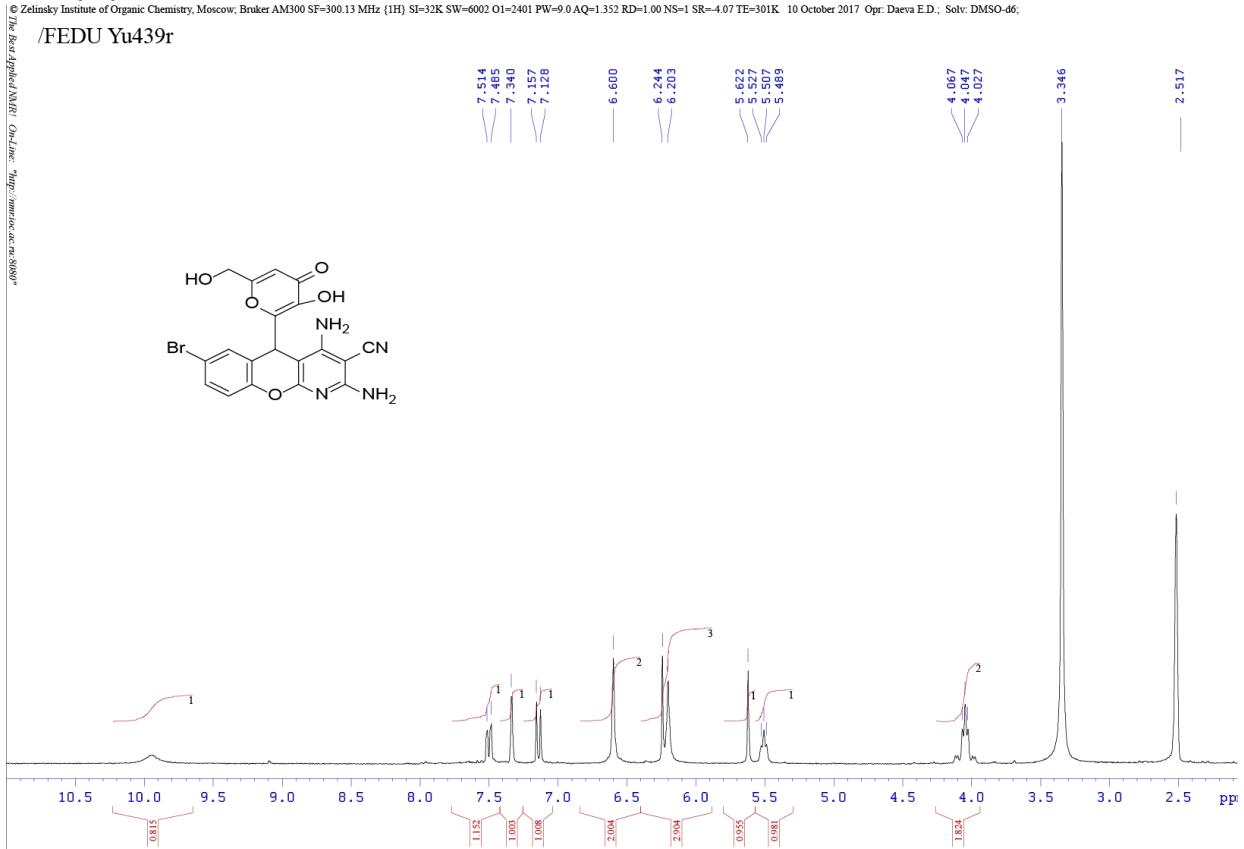
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2,4-Diamino-7-bromo-5-(3-hydroxy-6-(hydroxymethyl)-4-oxo-4H-pyran-2-yl)-5H-chromeno[2,3-*b*]pyridine-3-carbonitrile (2f).

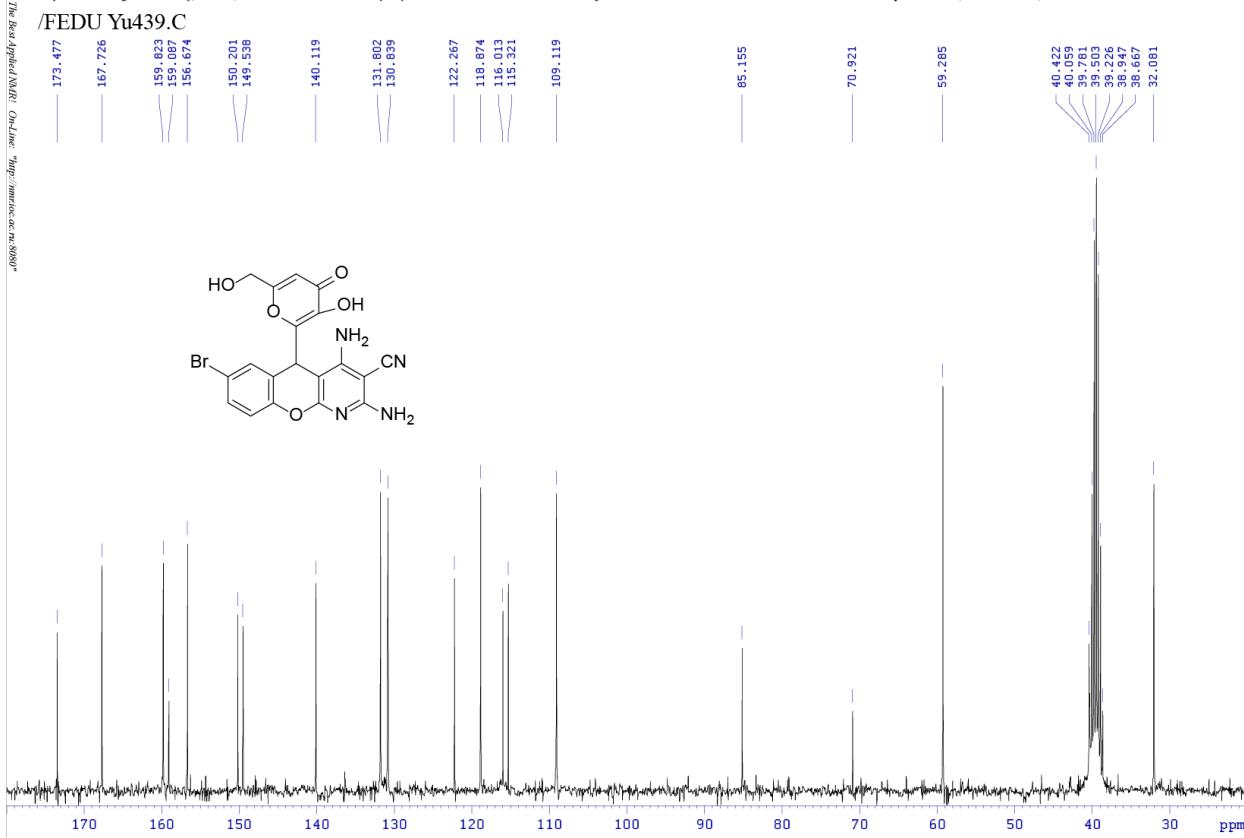
© Zelinsky Institute of Organic Chemistry, Moscow, Bruker AM300 SF=300.13 MHz (1H) SI=32K SW=6002 O1=2401 PW=9.0 AQ=1.352 RD=1.00 NS=1 SR=4.07 TE=301K 10 October 2017 Opr: Daeva E.D., Solv: DMSO-d6.

/FEDU Yu439r

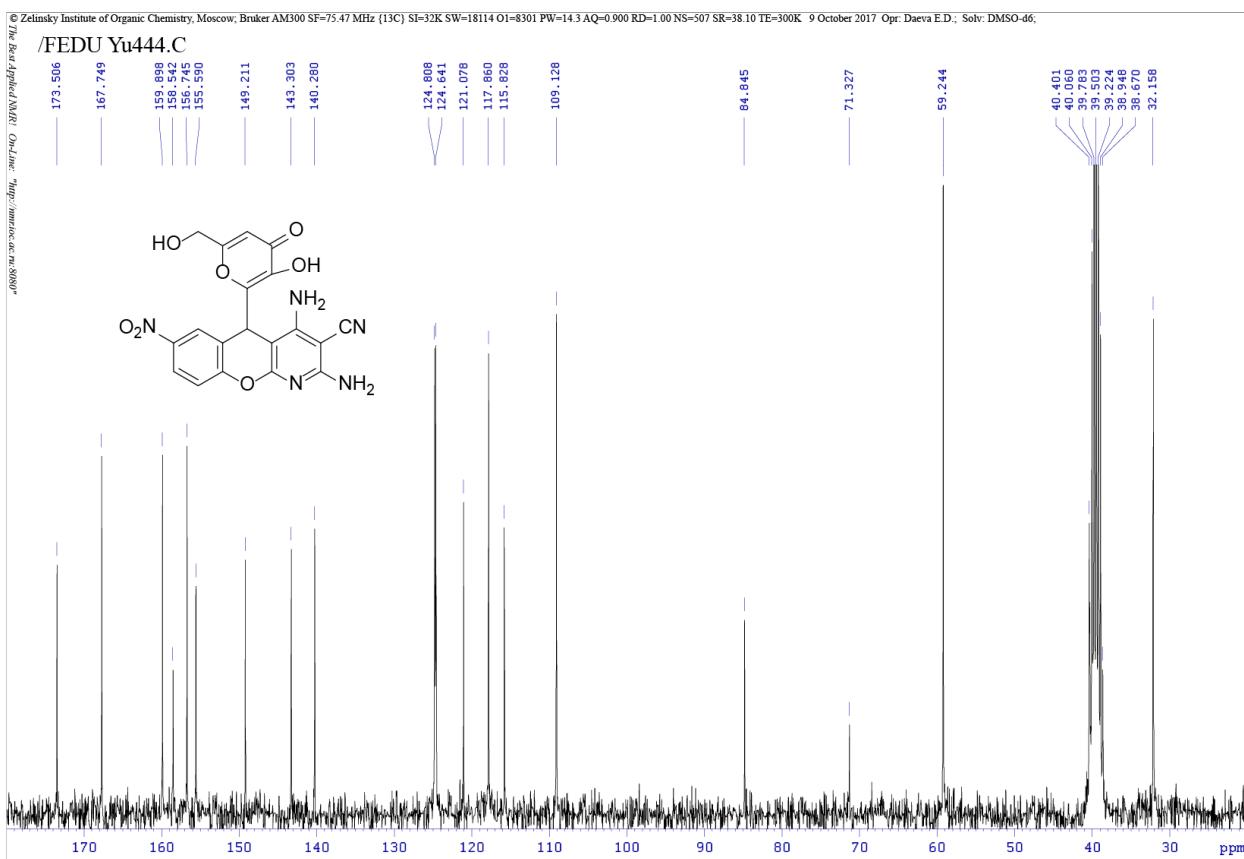
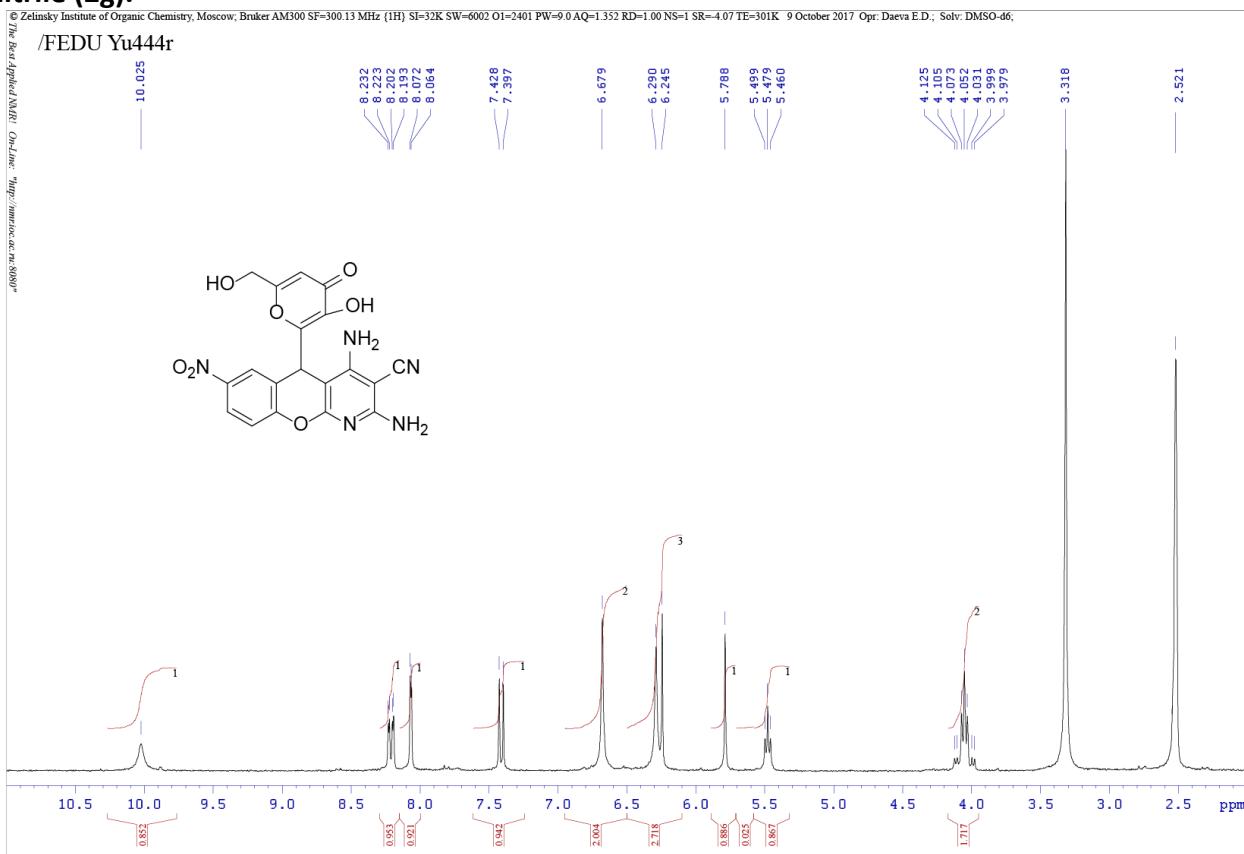


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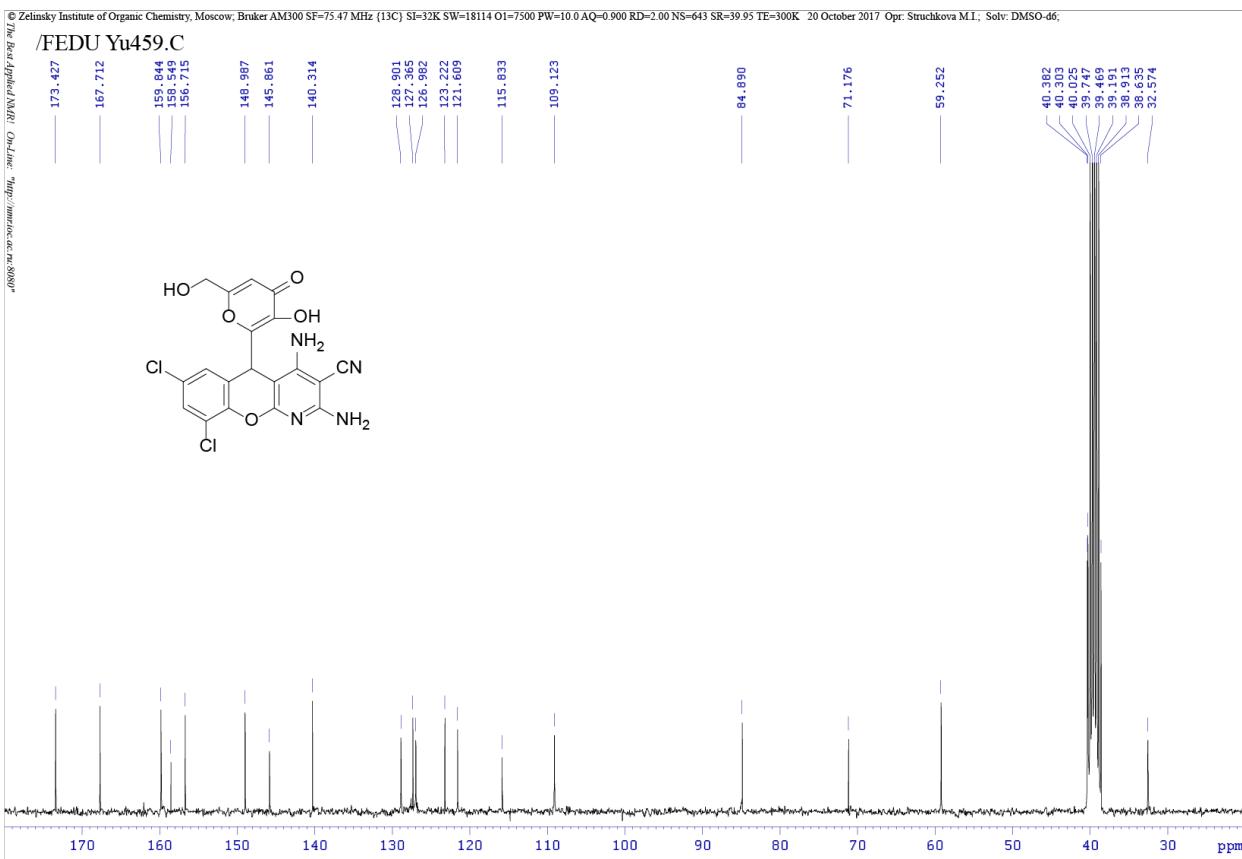
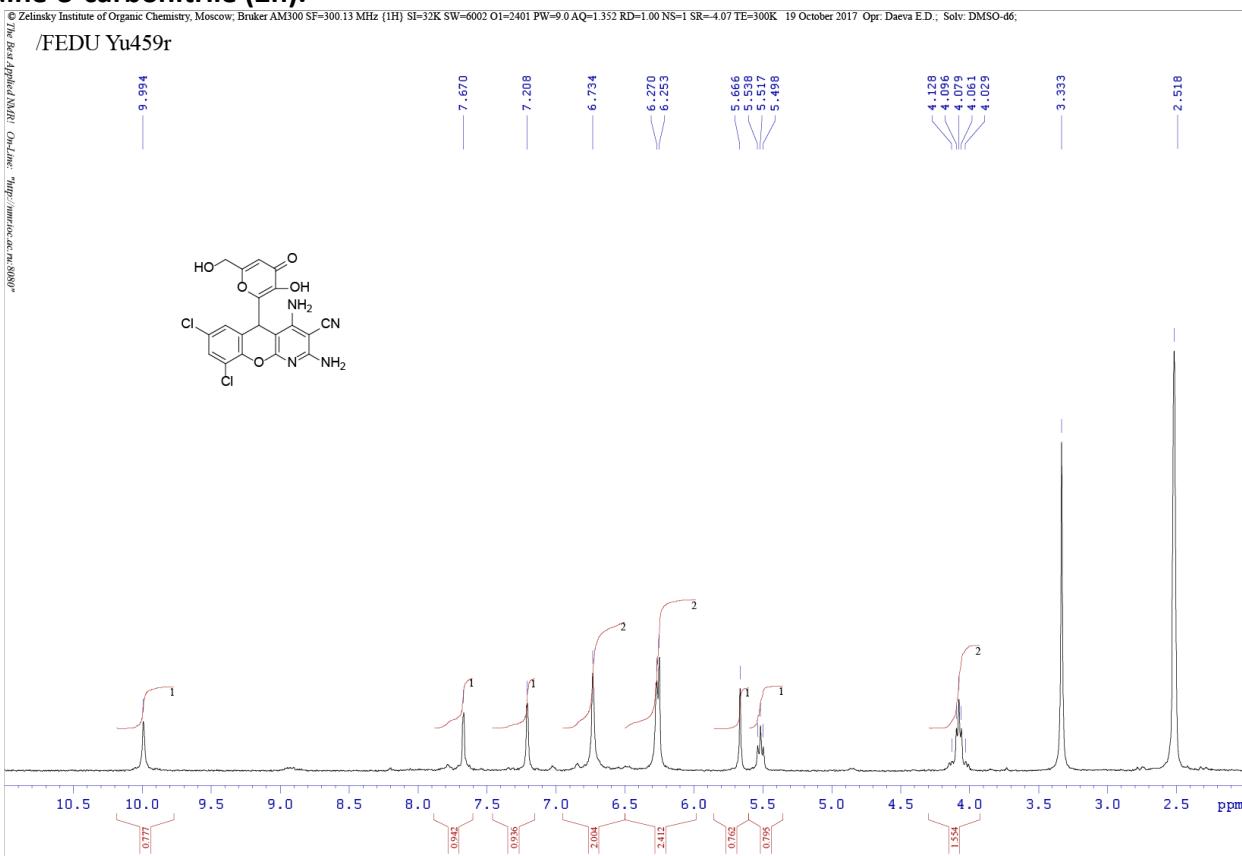
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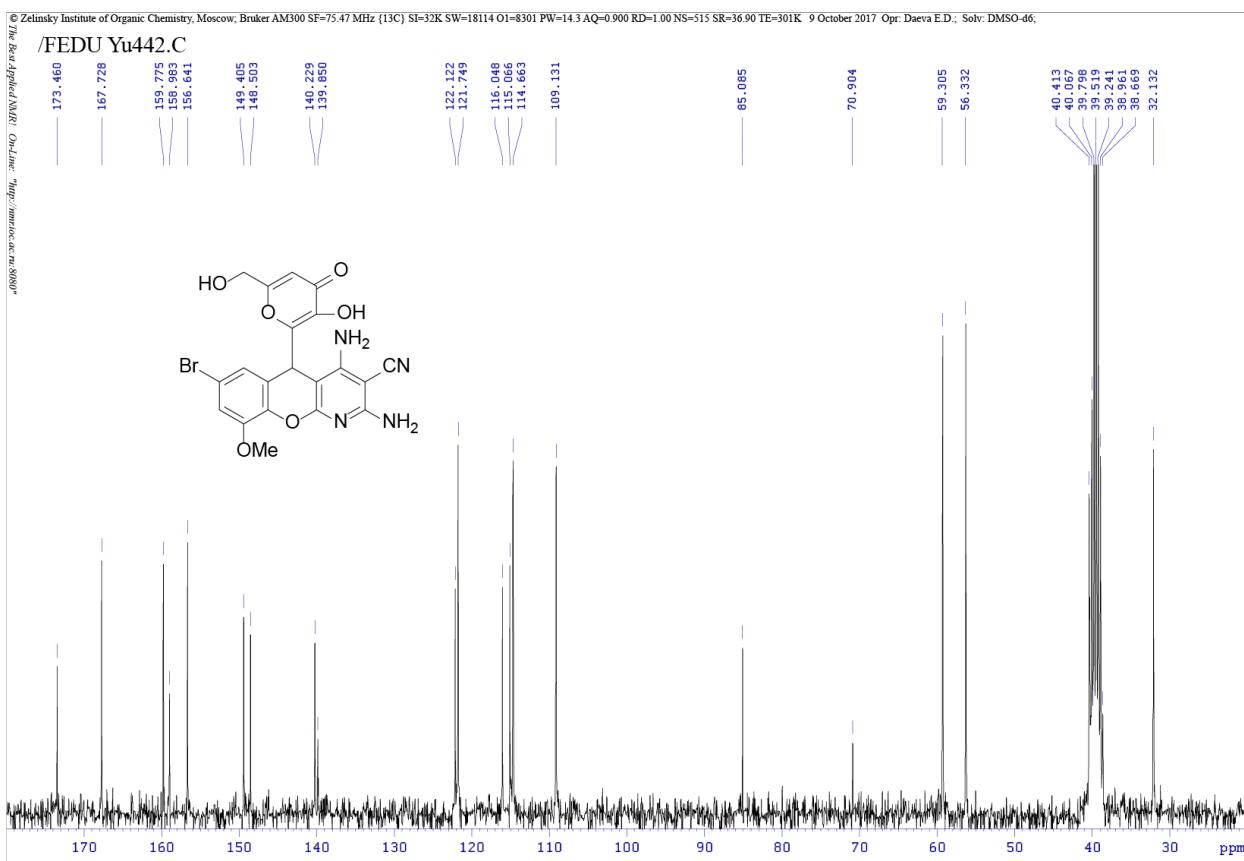
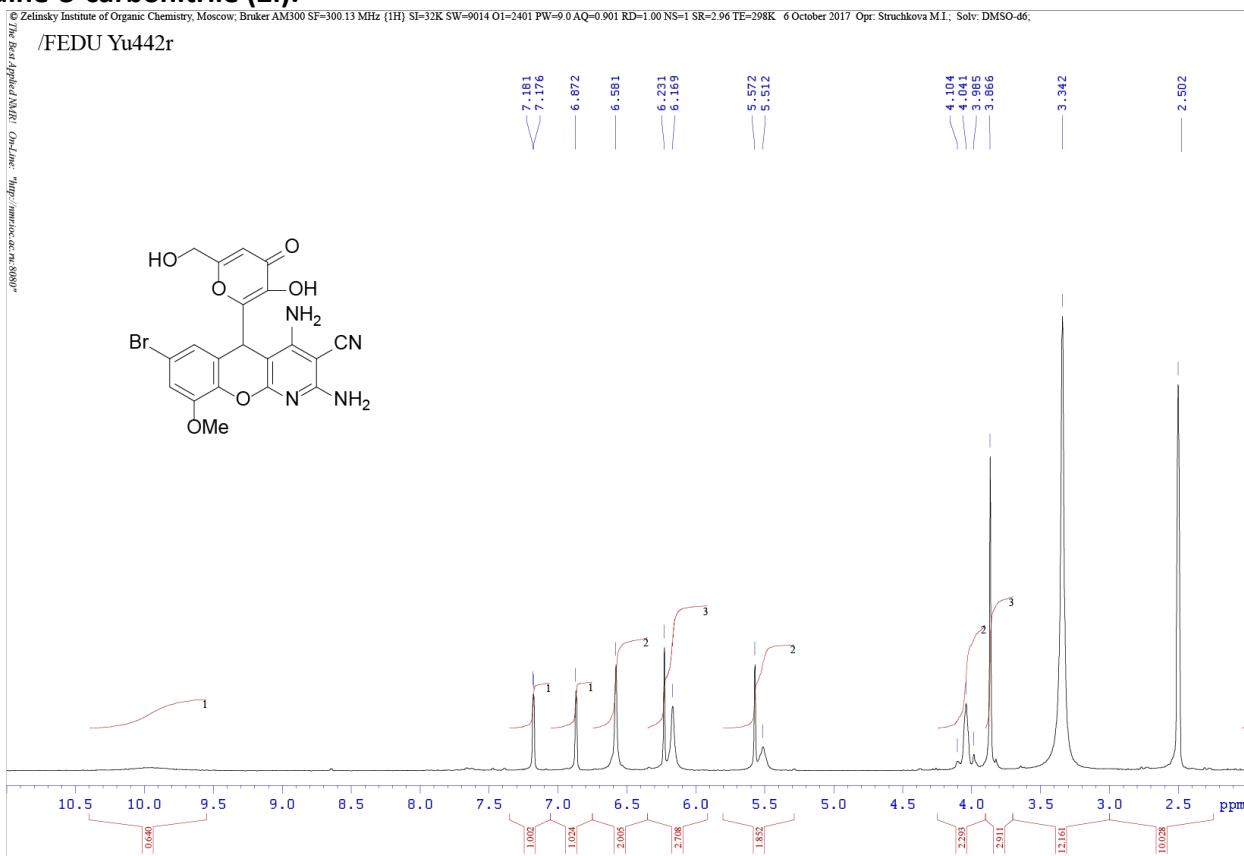
2,4-Diamino-5-(3-hydroxy-6-(hydroxymethyl)-4-oxo-4H-pyran-2-yl)-7-nitro-5H-chromeno-[2,3-*b*]pyridine-3-carbonitrile (2g).



2,4-Diamino-7,9-dichloro-5-(3-hydroxy-6-(hydroxymethyl)-4-oxo-4H-pyran-2-yl)-5H-chromeno[2,3-b]pyridine-3-carbonitrile (2h).



2,4-Diamino-7-bromo-5-(3-hydroxy-6-(hydroxymethyl)-4-oxo-4H-pyran-2-yl)-9-methoxy-5H-chromeno[2,3-*b*]pyridine-3-carbonitrile (2i).

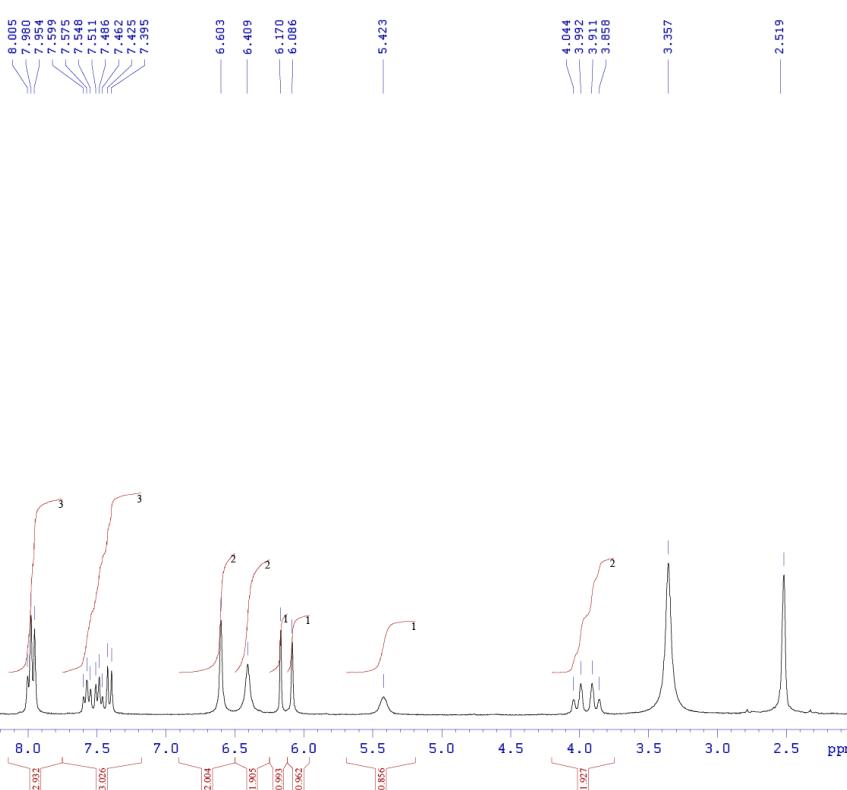


9,11-Diamino-12-(3-hydroxy-6-(hydroxymethyl)-4-oxo-4H-pyran-2-yl)-12H-benzo[5,6]chromeno[2,3-b]pyridine-10-carbonitrile (2j).

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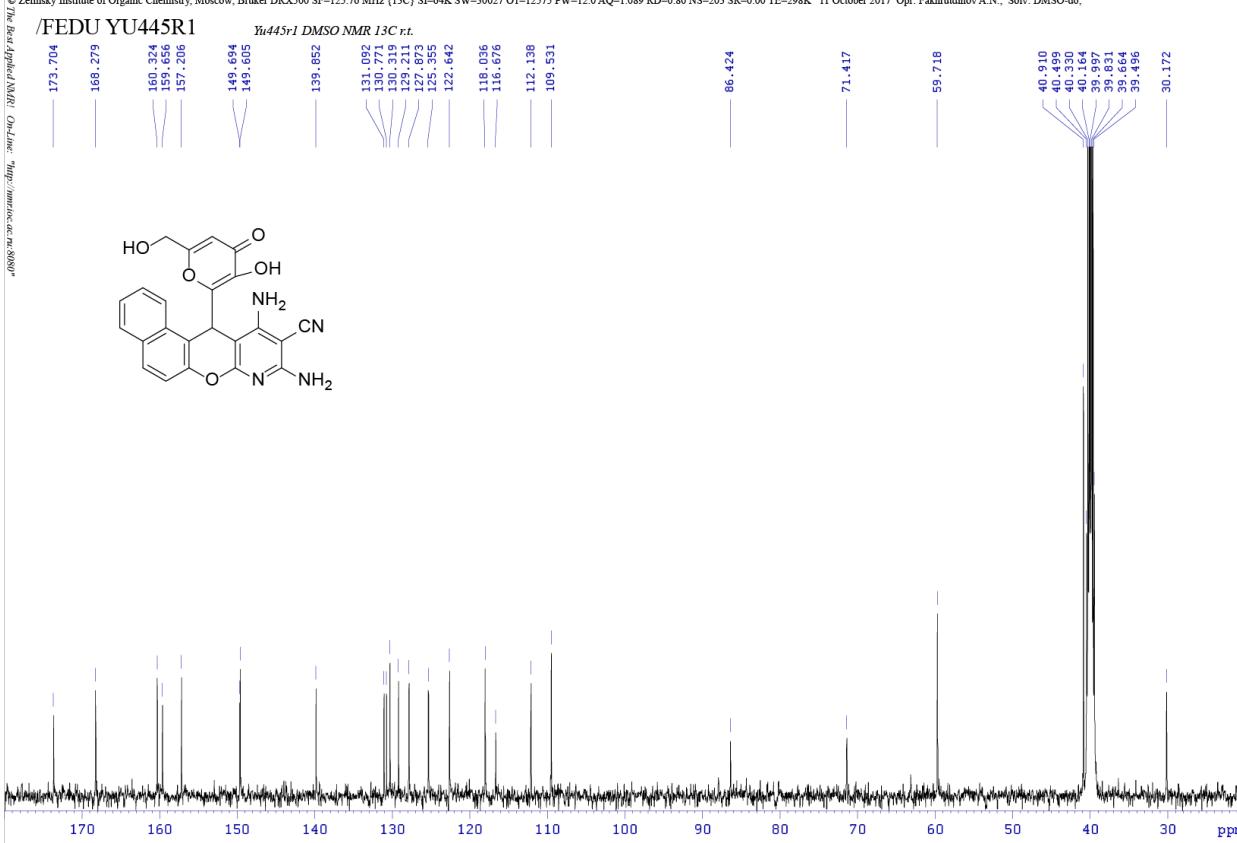
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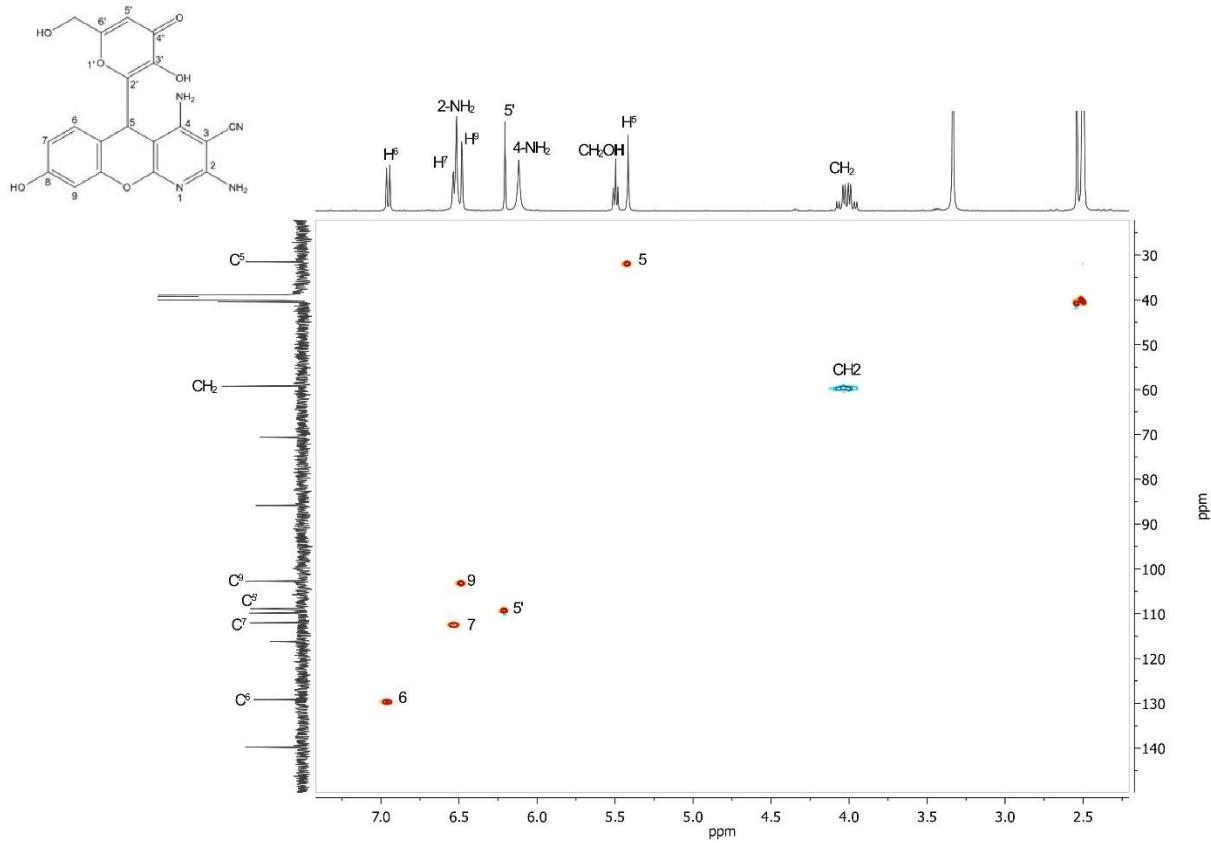
The Best Applied NMR On-Line: <http://nmrdb.org>, 8080r



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/FEDU YU445R1



¹H-¹³C HSQC for 2d

¹H-¹³C HMBC for 2d