

DAFTAR PUSTAKA

- Aditama, T.Y., 2014, Mott dan Multidrug Resisten (MDR), *J.Resp Ind.*, **42**: 157.
- Arham, M. Y., Raya, I., dan Usman, H., 2014, *Sintesis dan Karakterisasi Senyawa Kompleks La(III) dengan 2,9-Dimetil Fenantrolin dan Heptilmetilditiokarbamat serta Potensinya Sebagai Anti Tuberkulosis*, Skripsi tidak diterbitkan, Jurusan Kimia, Fakultas Matematika dan Ilmu Pengetahuan Alam, Universitas Hasanuddin, Makassar
- Ariami, P., Diarti, M.W., dan Jiwintarum, Y., 2014, Sensitivitas Media Ogawa dan Media Lowenstein Jensen terhadap Hasil Pertumbuhan Kuma Mycobacterium Tuberculosis, *Jurnal Kesehatan Prima*, **8(2)**: 1322-1335.
- Brooks, G.F., Butel, S.B., dan Mores S.A., 2001, *Mikrobiologi Kedokteran*, EGC, Jakarta.
- Brunton, L., Parker, K., Blumenthal, D., dan Burton, I., 2008, *Manual of Pharmacology and Therapeutics*, McGraw-Hill Companies, USA.
- Carolina, A. N., 2011, *Sintesis Dan Karakterisasi Kompleks Ni(II), Pr(III), Dan Pt(IV) Ditiokarbamat Dan Potensinya Sebagai Anti Tuberkulosis*, Thesis Tidak Diterbitkan, Program Pascasarjana Universitas Hasanuddin, Makassar.
- Christian, W., Gomes, V.F., Rabna, P., Gustafson, P., Aaby, P., Lisse, I.M, Andersen, P.L., Glerup, H. dan Sodemann, M., 2009, Vitamin D as Supplementary Treatment for Tuberculosis, *American Journal of Respiratory and Critical Care Medicine*, **179(9)**: 843-850.
- Correia, 1994, *Biotransformasi Obat*, dalam Bertram, G., dan Katzung, *Farmakologi Dasar dan Klinik*, Edisi VI, EGC, Jakarta.
- Crick, D.C., Brennan, P.J., dan Mcneil, M.R., 2004, *The Cell Wall of Mycobacterium Tuberculosis*, Lippincots Williams & Willkins, Philadelphia.
- Dao, D.N., Kremer, L., Guerardel, Y., Molano, A., Jacobs, Jr. W.R., dan Porcelli, S.A., 2004, Mycobacterium tuberculosis Lipomannan Induces Apoptosis and Interleukin-12 Production in Macrophages, *Journal of Infection and Immunity*, **72(4)**: 2067-2074.
- Darmanto, 2001, *Lingkungan Hidup dan Pencemaran (Hubungannya dengan Toksikologi Senyawa Logam)*, UI press, Jakarta.
- DeWitt, P.D., Barnes, P.F., dan Gordon, S.B., 2008, *Clinical tuberculosis*, Elsevier, London.



Debbie, S.R., dan Roga, F.K., 2004, Mekanisme Tingkat Molekul Resistensi terhadap Beberapa Obat pada Mycobacterium Tuberculosis, *Acta Pharmaceutica Indonesia*, **29**(3), 92-95.

Departemen Kesehatan Republik Indonesia, 2011, *Pedoman Nasional Penanggulangan Tuberculosis*, edisi cetakan ke-2, Depkes RI, Jakarta.

Dirjen POM, 2001, *Farmakope Indonesia Edisi IV*, Depkes RI, Jakarta.

Doyle, M.P., 1980, *Experimental Organic Chemistry*, John Wiley & Sons, New York.

Firdaus, 2011, *Teknik dalam Laboratorium Kimia Organik*, Unhas, Makassar.

Fujiko, A., 2002, *TB Bacteriology Examination to Stop TB*, The Research Institute of Tuberculosis, JATA, Jepang.

Garrity, G.M., 2001, *Editor in Chief Bergey Manual of Systematic 2nd ed Springer*, Verlag, New York.

Goldstein, L.B., 2011, Guidelines for the Primary Prevention of Stroke: a Guideline for Healthcare Professionals from the American Heart Association/American Stroke Association, *Stroke*, **42**(5): 17-18.

Hasminisari, Raya, I., dan Usman, H., 2011, *Sintesis dan Karakterisasi Senyawa Kompleks Pb(II) dengan Heptilmetilditiokarbamat serta Potensinya Sebagai Anti Tuberculosis*, Skripsi tidak diterbitkan, Jurusan Kimia, Fakultas Matematika dan Ilmu Pengetahuan Alam, Universitas Hasanuddin, Makassar

Istiantoro, Y.H., dan Setiabudy, R., 2007, *Tuberkulostatik dan Leprostatik*, Universitas Indonesia, Jakarta.

Jawetz, E., Melnick, J., dan Adelberg, E.A., 1996, *Mikrobiologi Kedokteran, Edisi 20*, EGC, Jakarta.

Jussi, J., Saukkonen, Davis, L.C., & Robert, M.J., 2006, Hepatotoxicity of Antituberculosis Therapy, *American Journal of Respiratory and Critical Care Medicine*, **174**: 935-952.

Lestari, I., Afrida, Sanova, A., dan 2014, Sintesis dan Karakterisasi Senyawa Kompleks Logam Kadmium (II) dengan Ligan Kufperon, **16**(1): 1-8.

Mulya, H. S. P., 2010, Faktor-faktor yang Mempengaruhi Kejadian TB Paru dan Cara Penanggulannya, *Jurnal Ekologi Kesehatan*, **9**(4): 1340-1346

Rowland, M., 1982, *Martindale: The Extra Pharmacopoeia*, 28th ed., The Pharmaceutical Press, London.



- McDermott, W., 1958, Microbial Persistence, *Yale Journal of Biology and Medicine*, **30**(4), 257-291.
- McLean, A.N., 2007, Roles of Learning Theory and Ethology in Equitation, *Journal of Veterinary Behavior*, **2**: 108-118.
- Merck, 2006, *An Encyclopedia of Chemical Drugs and Biologicals*. Merck Co. Inc., USA.
- Moffat, A.C., Osselton, D., Widdop, B., & Clarke, E.G.C., 2012, *Clarke's Analysis of Drugs and Poisons*, Pharmaceutical Press, London.
- Muchtadi, D., 1993, *Teknik Evaluasi Nilai Gizi Protein*. IPB, Bogor.
- Mulyaningsih, R., 2009, Kandungan Unsur Fe dan Zn dalam Bahan Pangan Produk Pertanian, Peternakan dan Perikanan dengan Metode k0-AANI, *Jurnal Sains dan Teknologi Nuklir Indonesia*, **10**(2): 71-80.
- Mycek, M.J., Harvey, R.A., dan Champe, P.C., 2001, *Farmakologi Ulasan Bergambar*, Widya Medika, Jakarta.
- Nasution, M.N., 2004, *Manajemen Jasa Terpadu*, PT Ghalia Indonesia, Jakarta.
- Nugrahaeni, D. K., dan Malik, U. S., 2015, Analisis Penyebab Resistensi Obat Anti Tuberkulosis, *KEMAS*, **11**(1): 8-15.
- Nurul, D., dan Kaswandhani, N., 2016, Laporan kasus berbasis bukti Perbandingan Efektivitas Isoniazid pada Preparat Kombinasi Isoniazid dan Rifampisin pada Anak dengan Infeksi Laten Tuberkulosis, *Sari Pediatri*, **17**(6): 485-490.
- Padmanaba, 2006, Pengaruh Penerangan dalam Ruang Terhadap Produktivitas Kerja Desain Interior, *Program Studi Desain Interior FSRD*, **4**(2): 57-63.
- Palomino, J.C., Leao, S.C, dan Ritacco, V., 2007, New Developments and Perspectives, *Basic Science to Patient Care*, 661-680.
- Petri, W.A., 2006, *Chemotherapy of Tuberculosis, Mycobacterium Avium Complex Disease, and Leprosy*, Graw Hill Companies Inc., New York.
- Prihatni. D., Parwati, I., Sjahid, I., dan Rita, C., 2015, Efek Hepatotoksik Anti Tuberkulosis terhadap Kadar Aspartate Aminotransferase Dan Alanine Aminotransferase Serum Penderita Tuberkulosis Paru, *Indonesian Journal of Clinical Pathology and Medical Laboratory*, **12**(1): 1-5

S., & Cole, S., 2008, Mechanism of Drug Resistance in Mycobacterium tuberculosis, Taylor & Francis Group, Denve.

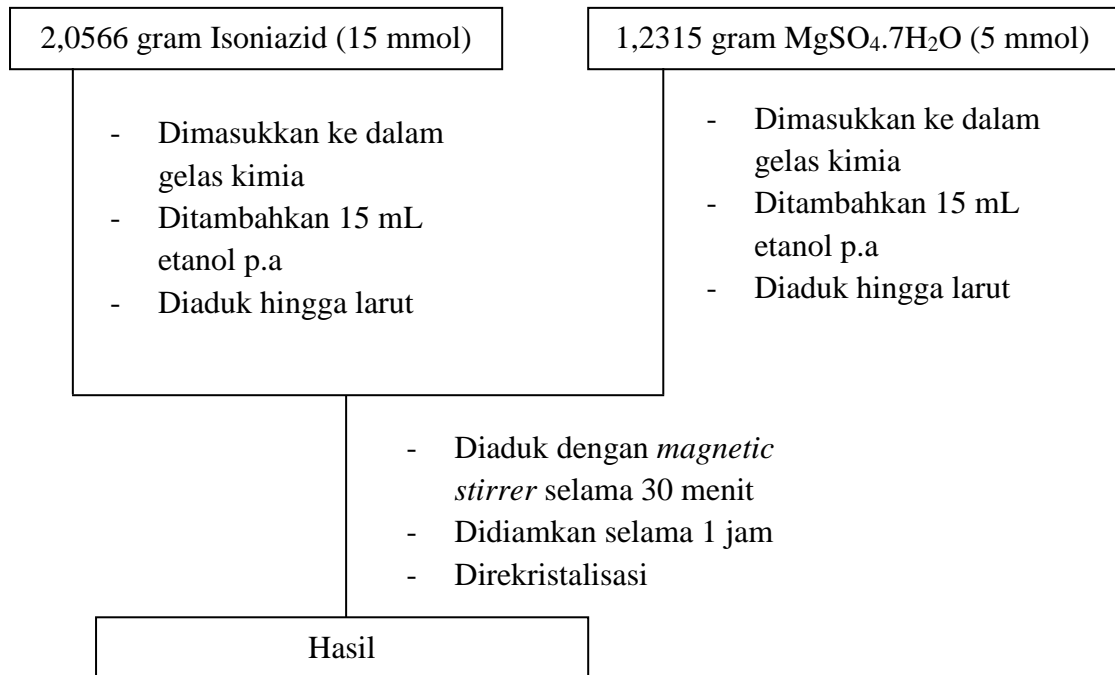
N., 2005, *Buku Ajar Respirologi Anak*, IDAI, Jakarta.



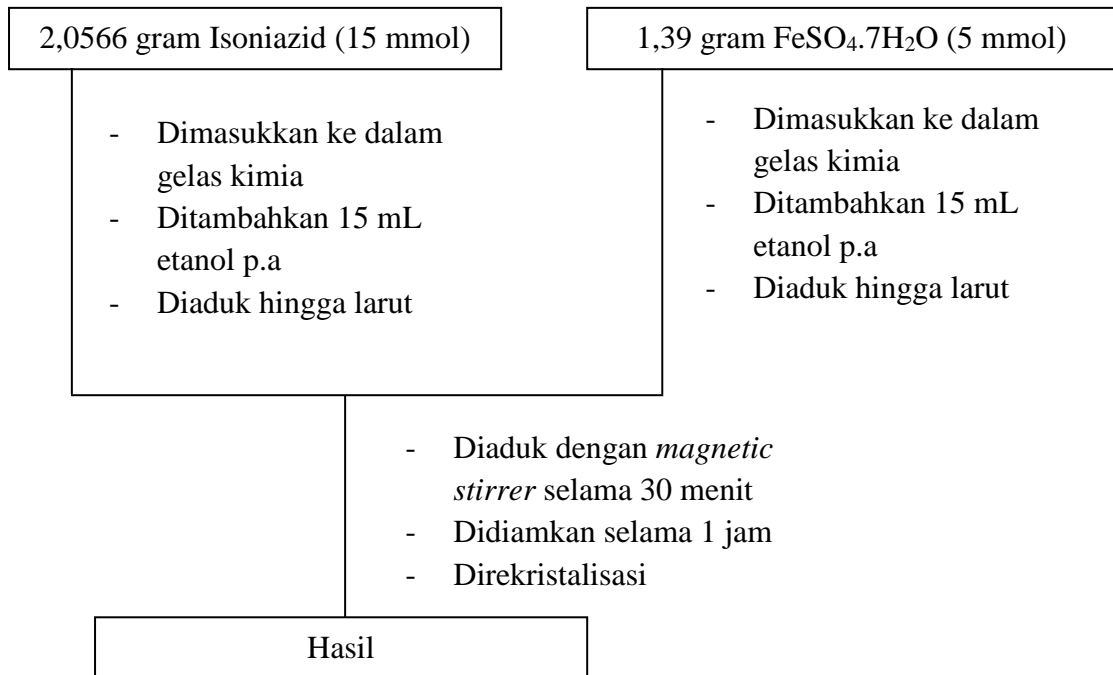
- Rozwarski, D.A., Grant, G.A., Barton, D.H., Jacobs, W.R., dan Sacchettini, J.C., 1998, Modification of the NADH of the Isoniazid Target (InhA) from *Mycobacterium tuberculosis*, *Science*, **279**, 98–102.
- Sera, Y.F., dan Kartika, F.G., 2018, Ekstraksi Logam Zink (Zn) dari Limbah Lumpur Elektroplating dengan Pemanasan Biasa dan Microwave, *Jurnal Tidak Diterbitkan*, Universitas Riau, Riau.
- Shehla, G., 1985, *Vogel: Buku Teks Analisis Anorganik Kualitatif makro dan Semimikro, edisi kelima, bagian I*, PT Kalman Putaka, Jakarta.
- Siregar, M. I. T., 2015, Mekanisme Resistensi Isoniazid & Mutasi Gen KatG Ser315Thr (G944C) *Mycobacterium tuberculosis* Sebagai Penyebab Tersering Resistensi Isoniazid, *JMJ*, **3**(2):119 – 131.
- Socrates, G., 2004, *Infrared & Raman Characteristic Group Frequencies*, John Wiley & Sons, New York.
- Storla, D.G., 2008, A systematic review of delay in the diagnosis and treatment of tuberculosis. *BMC Public Health*, 8-15.
- Suharyo, 2013, Determinasi Penyakit Tuberkulosis di Daerah Pedesaan, *Jurnal KEMAS*, **9**(1): 85-91.
- Syamsi'on, I., Prabowo, T., dan Haryani, 2009, Analisis Pelaksanaan Strategi DOTS dalam Penanggulangan Tuberkulosis pada Puskesmas di Wilayah Kabupaten Bengkayang Kalimantan Barat, *JIK*, **4**(2), 88-95.
- Takayama, K., Wang, C., dan Besra, G. S., 2005. Pathway to Synthesis and Processing of Mycolic Acids in *Mycobacterium tuberculosis*, *Clinical Microbiology Reviews*, **18**(1): 81–101.
- Timmins, G.S., dan Vojo, D., 2006, Mechanism of Action of Isoniazid, *Molecular Microbiology*, **62**(5), 1220-1227.
- Utji, R., dan Harun, H., 1994, *Kuman Tahan Asam dalam Buku Ajar Mikrobiologi Kedokteran Edisi Revisi*, ECG, Jakarta.
- Weisiger, R.A., 2007, Isoniazid hepatotoxicity, *Emedicine*, **21**: 1-10.
- Winarmo, F.G., 2004, *Kimia Pangan dan Gizi*, PT Gramedia Pustaka Utama, Jakarta.
- WHO, 2017, *Global Tuberculosis Report*, WHOpress, France,



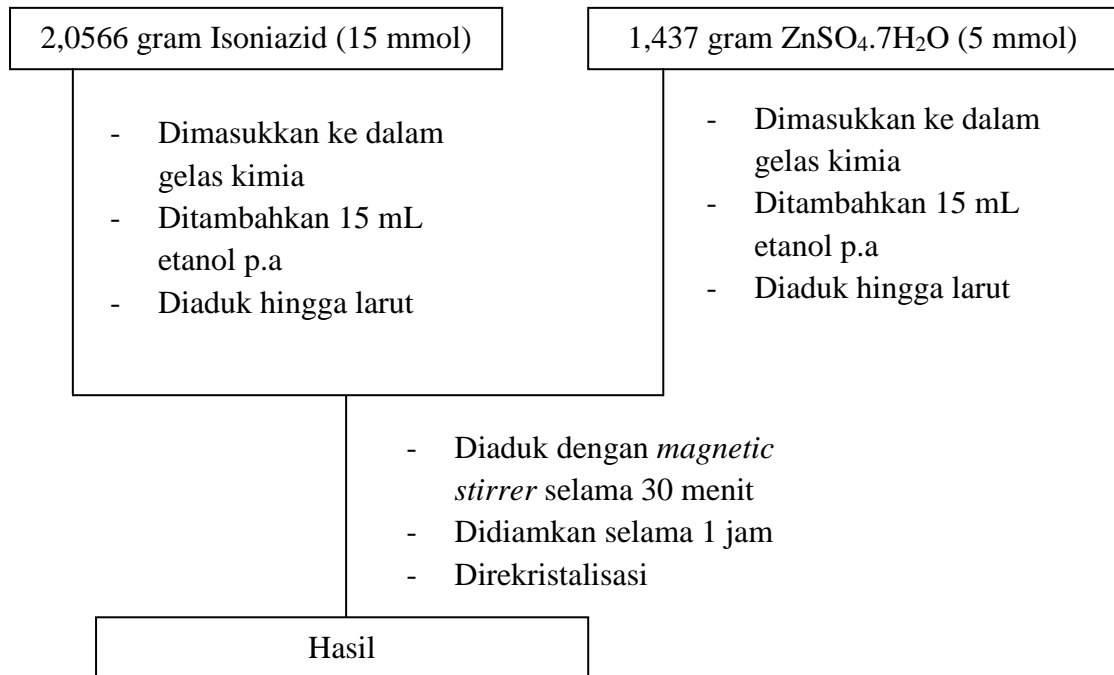
Lampiran 1. Bagan Kerja Pembuatan Senyawa Kompleks Mg-isoniazid



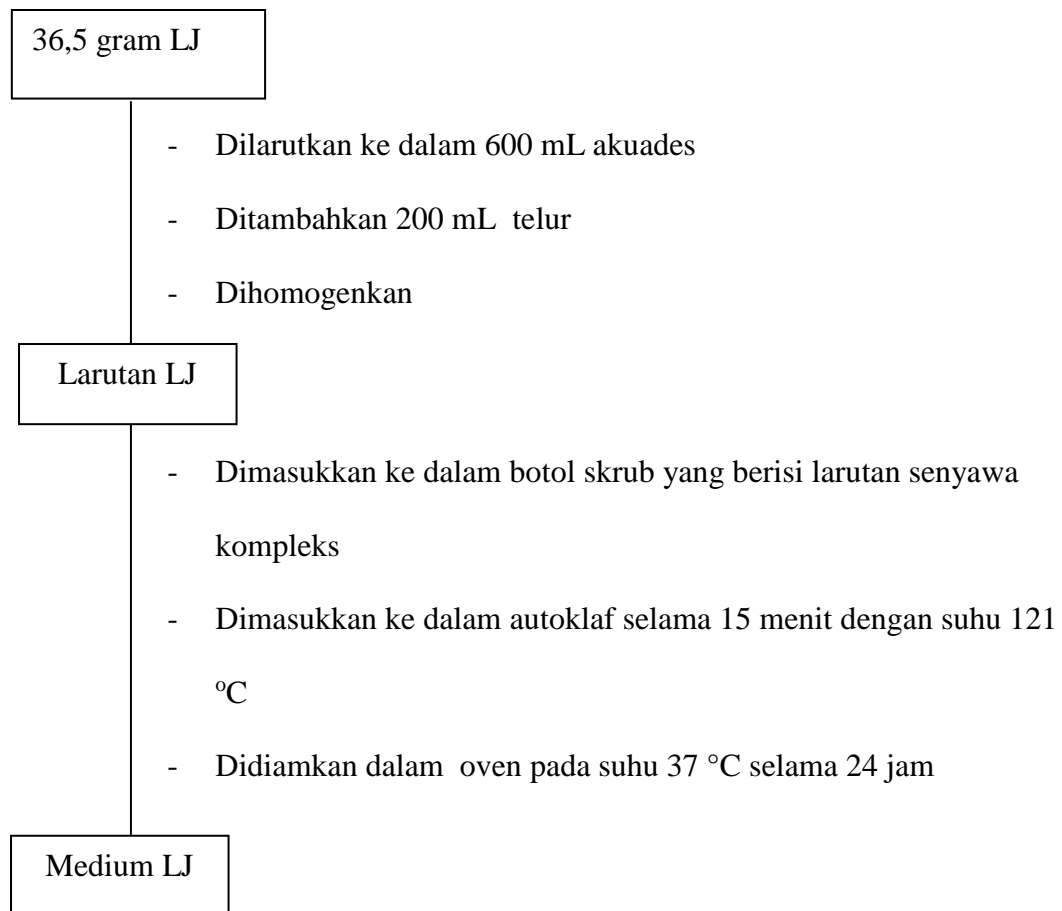
Lampiran 2. Bagan Kerja Pembuatan Senyawa Kompleks Fe-isoniazid



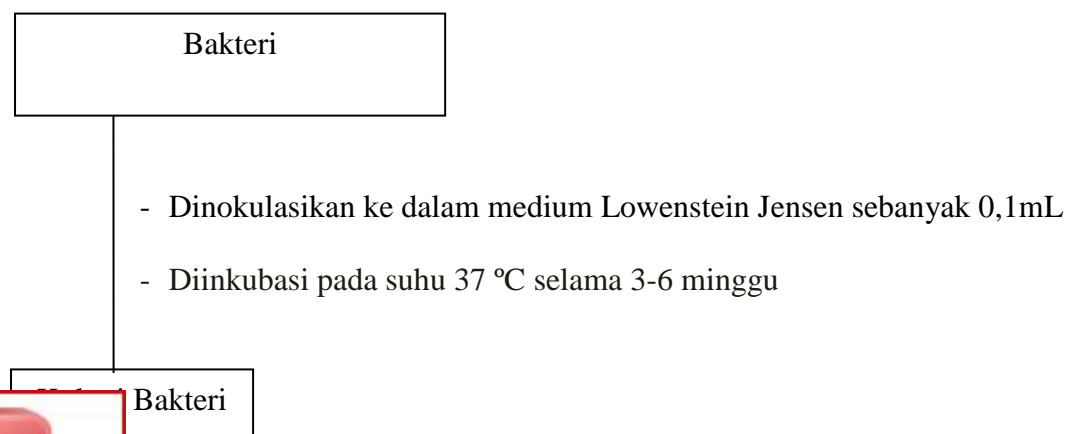
Lampiran 3. Bagan Kerja Pembuatan Senyawa Kompleks Zn-isoniazid



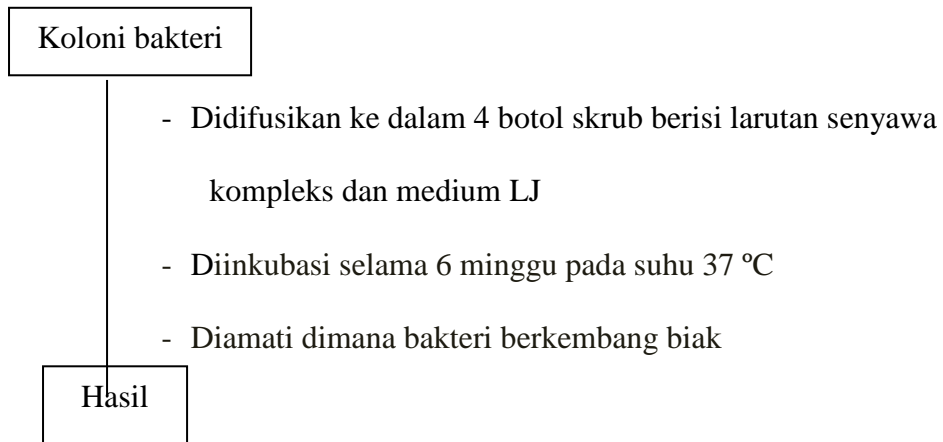
Lampiran 4. Bagan Kerja Pembuatan Medium Pertumbuhan LJ



Lampiran 5. Bagan Kerja Penyiapan Bakteri Uji



Lampiran 6. Bagan Kerja Uji Aktivitas Senyawa Kompleks



Lampiran 7. Perhitungan Rendemen Senyawa Kompleks

a. Senyawa Kompleks Mg-isoniazid

$$\begin{aligned}\% \text{ rendemen} &= \frac{\text{berat praktek}}{\text{berat teori}} \times 100\% \\ &= \frac{2,0413 \text{ gram}}{3,2881 \text{ gram}} \times 100\% \\ &= 62,08\%\end{aligned}$$

b. Senyawa Kompleks Fe-isoniazid

$$\begin{aligned}\% \text{ rendemen} &= \frac{\text{berat praktel}}{\text{berat teori}} \times 100\% \\ &= \frac{2,9103 \text{ gram}}{3,4466 \text{ gram}} \times 100\% \\ &= 84,44\%\end{aligned}$$

c. Senyawa Kompleks Zn-isoniazid

$$\begin{aligned}\% \text{ rendemen} &= \frac{\text{berat praktek}}{\text{berat teori}} \times 100\% \\ &= \frac{3,0135 \text{ gram}}{3,4963 \text{ gram}} \times 100\% \\ &= 86,19\%\end{aligned}$$

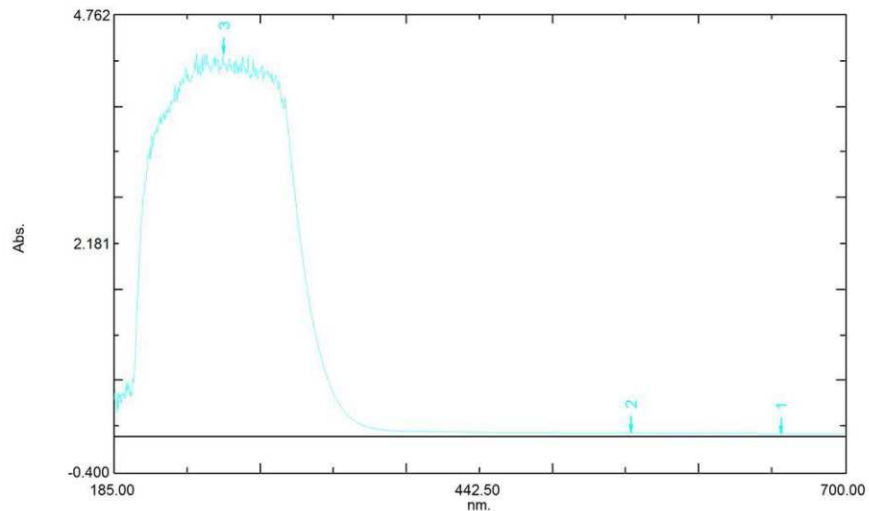


Lampiran 8. Data Spektrum UV-Vis Senyawa Isoniazid

Spectrum Peak Pick Report

01/03/2019 10:57:15 AM

Data Set: Isoniazid.spc - RawData



[Measurement Properties]
 Wavelength Range (nm.): 185.00 to 700.00
 Scan Speed: Medium
 Sampling Interval: 0.5
 Auto Sampling Interval: Enabled
 Scan Mode: Single

No.	P/V	Wavelength	Abs.	Description
1	①	655.50	0.033	
2	②	549.50	0.046	
3	③	262.00	4.312	

[Instrument Properties]
 Instrument Type: UV-2600 Series
 Measuring Mode: Absorbance
 Slit Width: 0.2
 Accumulation time: 0.2 sec.
 Light Source Change Wavelength: 323.0 nm
 Detector Unit: Direct
 S/R Exchange: Normal
 Stair Correction: OFF

[Attachment Properties]
 Attachment: None

[Operation]
 Threshold: 0.0010000
 Points: 4
 Interpolate: Disabled
 Average: Disabled

[Sample Preparation Properties]
 Weight:
 Volume:
 Dilution:
 Path Length:
 Additional Information:

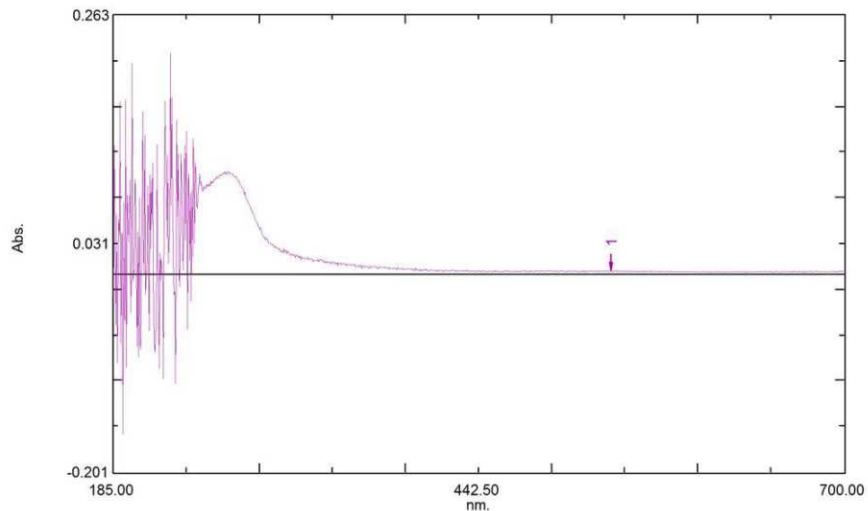


Lampiran 9. Data Spektrum UV-Vis Senyawa Kompleks Mg-isoniazid

Spectrum Peak Pick Report

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Data Set: Mg Isoniazid.spc - RawData



[Measurement Properties]
 Wavelength Range (nm.): 185.00 to 700.00
 Scan Speed: Medium
 Sampling Interval: 0.5
 Auto Sampling Interval: Enabled
 Scan Mode: Single

No.	P/V	Wavelength	Abs.	Description
1		535.50	0.004	

[Instrument Properties]
 Instrument Type: UV-2600 Series
 Measuring Mode: Absorbance
 Slit Width: 0.2
 Accumulation time: 0.2 sec.
 Light Source Change Wavelength: 323.0 nm
 Detector Unit: Direct
 S/R Exchange: Normal
 Stair Correction: OFF

[Attachment Properties]
 Attachment: None

[Operation]
 Threshold: 0.0010000
 Points: 4
 InterPolate: Disabled
 Average: Disabled

[Sample Preparation Properties]
 Weight:
 Volume:
 Dilution:
 Path Length:
 Additional Information:

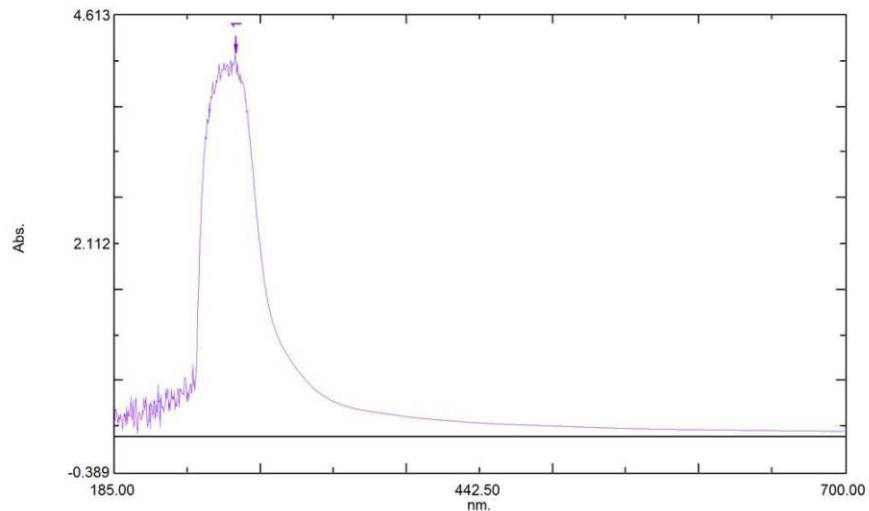


Lampiran 10. Data Spektrum UV-Vis Senyawa Kompleks Fe-isoniazid

Spectrum Peak Pick Report

01/03/2019 10:56:14 AM

Data Set: Fe Isoniazid.spc - RawData



[Measurement Properties]
 Wavelength Range (nm.): 185.00 to 700.00
 Scan Speed: Medium
 Sampling Interval: 0.5
 Auto Sampling Interval: Enabled
 Scan Mode: Single

No.	P/V	Wavelength	Abs.	Description
1	4	270.50	4.196	

[Instrument Properties]
 Instrument Type: UV-2600 Series
 Measuring Mode: Absorbance
 Slit Width: 0.2
 Accumulation time: 0.2 sec.
 Light Source Change Wavelength: 323.0 nm
 Detector Unit: Direct
 S/R Exchange: Normal
 Stair Correction: OFF

[Attachment Properties]
 Attachment: None

[Operation]
 Threshold: 0.0010000
 Points: 4
 Interpolate: Disabled
 Average: Disabled

[Sample Preparation Properties]
 Weight:
 Volume:
 Dilution:
 Path Length:
 Additional Information:

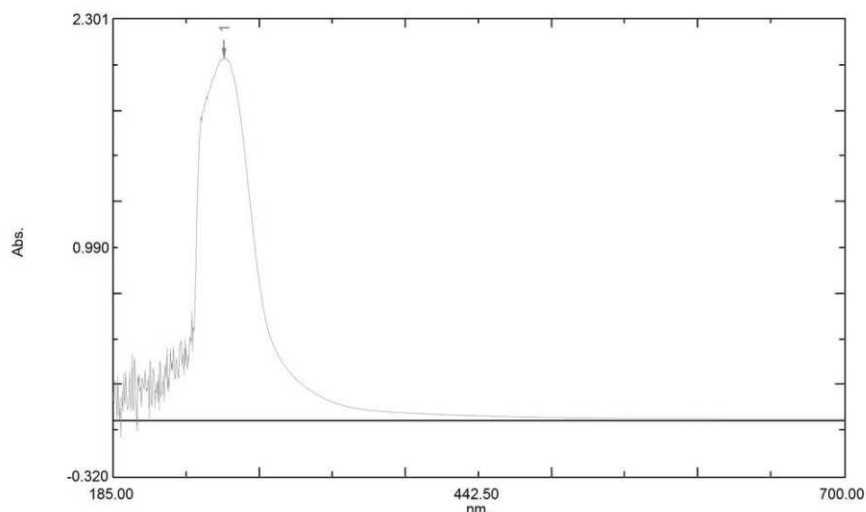


Lampiran 11. Data Spektrum UV-Vis Senyawa Kompleks Zn-isoniazid

Spectrum Peak Pick Report

01/03/2019 10:59:07 AM

Data Set: Zn Isoniazid.spc - RawData



[Measurement Properties]
 Wavelength Range (nm.): 185.00 to 700.00
 Scan Speed: Medium
 Sampling Interval: 0.5
 Auto Sampling Interval: Enabled
 Scan Mode: Single

No.	P/V	Wavelength	Abs.	Description
1	⊕	263.00	2.082	

[Instrument Properties]
 Instrument Type: UV-2600 Series
 Measuring Mode: Absorbance
 Slit Width: 0.2
 Accumulation time: 0.2 sec.
 Light Source Change Wavelength: 323.0 nm
 Detector Unit: Direct
 S/R Exchange: Normal
 Stair Correction: OFF

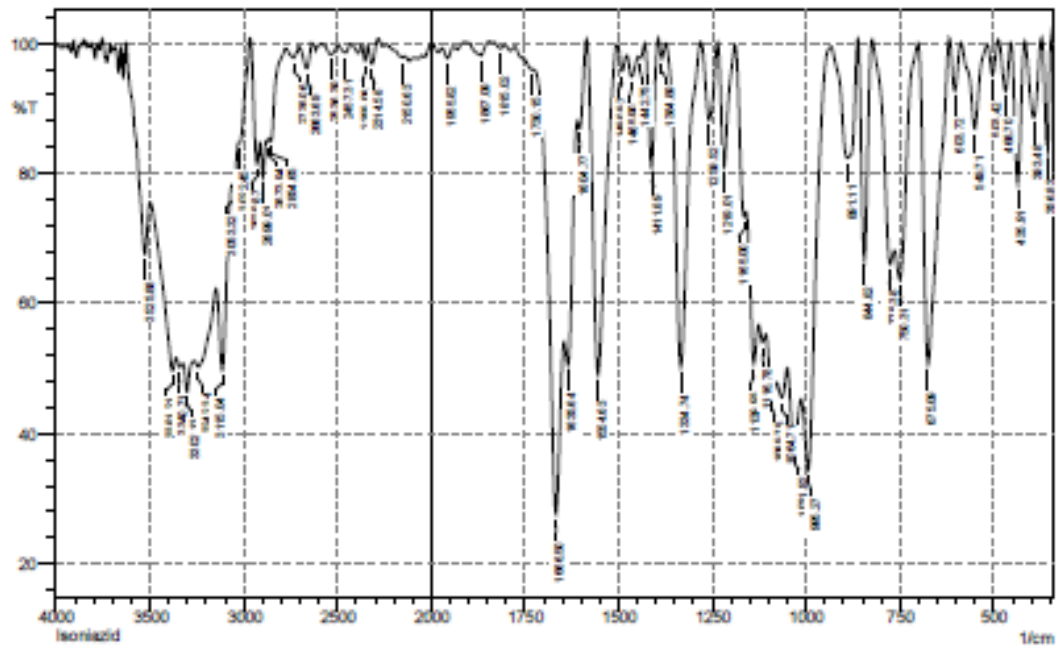
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[Operation]
 Threshold: 0.0010000
 Points: 4
 Interpolate: Disabled
 Average: Disabled

[Sample Preparation Properties]
 Weight:
 Volume:
 Dilution:
 Path Length:
 Additional Information:



Lampiran 12. Data FTIR Senyawa Isoniazid



Peak	Intensity	Corr. Intensity	Base (H)	Base (L)	Area	Corr. Area	
1	358.83	82.067	17.756	372.28	347.19	0.902	0.981
2	303.48	88.535	11.726	414.7	374.19	1.177	1.222
3	435.91	78.369	21.740	453.27	416.62	1.603	1.823
4	468.7	02.586	7.633	487.99	455.2	0.534	0.571
5	503.42	95.113	4.898	518.92	487.99	0.308	0.313
6	549.71	89.849	12.939	586.36	516.92	1.671	1.609
7	603.72	02.632	7.763	619.15	586.36	0.488	0.541
8	675.09	50.643	49.327	700.16	619.15	10.858	10.924
9	750.31	63.7	11.301	763.81	702.99	5.808	1.298
10	775.38	98.029	7.478	823.6	765.74	4.997	0.659
11	844.62	98.669	33.782	862.18	825.53	2.923	2.992
12	891.11	82.297	17.699	933.55	884.11	3.151	3.119
13	995.27	34.486	22.967	1012.63	935.48	15.611	4.003
14	1031.92	37.498	10.147	1049.28	1014.58	13.023	1.785
15	1064.71	45.598	3.341	1078.21	1051.2	8.851	0.466
16	1089.78	45.724	4.848	1107.14	1080.14	8.511	0.624
17	1116.78	54.027	1.88	1126.43	1109.07	4.523	0.139
18	1139.93	50.764	12.386	1159.22	1128.36	7.262	1.323
19	1165	73.32	4.326	1188.15	1161.15	2.298	0.415
20	1219.01	80.981	18.889	1236.37	1199.08	1.847	1.807
21	1259.52	88.997	11.822	1280.73	1238.3	1.267	1.25
22	1334.74	50.243	49.626	1373.32	1282.66	9.7	9.653
23	1384.89	97.585	2.701	1394.53	1375.25	0.097	0.12
24	1411.89	80.82	19.218	1429.25	1396.48	1.451	1.457
25	1442.75	97.59	0.948	1448.54	1431.18	0.133	0.047
26	1485.9	94.815	3.151	1477.47	1448.54	0.478	0.218
27	1490.97	95.677	3.224	1504.48	1477.47	0.307	0.177
28	1554.63	49.11	51.114	1585.49	1504.48	10.281	10.328
29	1604.77	89.881	3.149	1608.63	1587.42	0.754	0.223
30	1635.64	50.509	12.984	1645.28	1619.58	6.671	1.378
31	1666.5	27.712	36.468	1726.29	1647.21	18.459	7.598
32	1730.15	95.825	0.313	1753.29	1726.29	0.418	0.026
33	1815.02	99.099	0.729	1834.3	1803.44	0.081	0.045

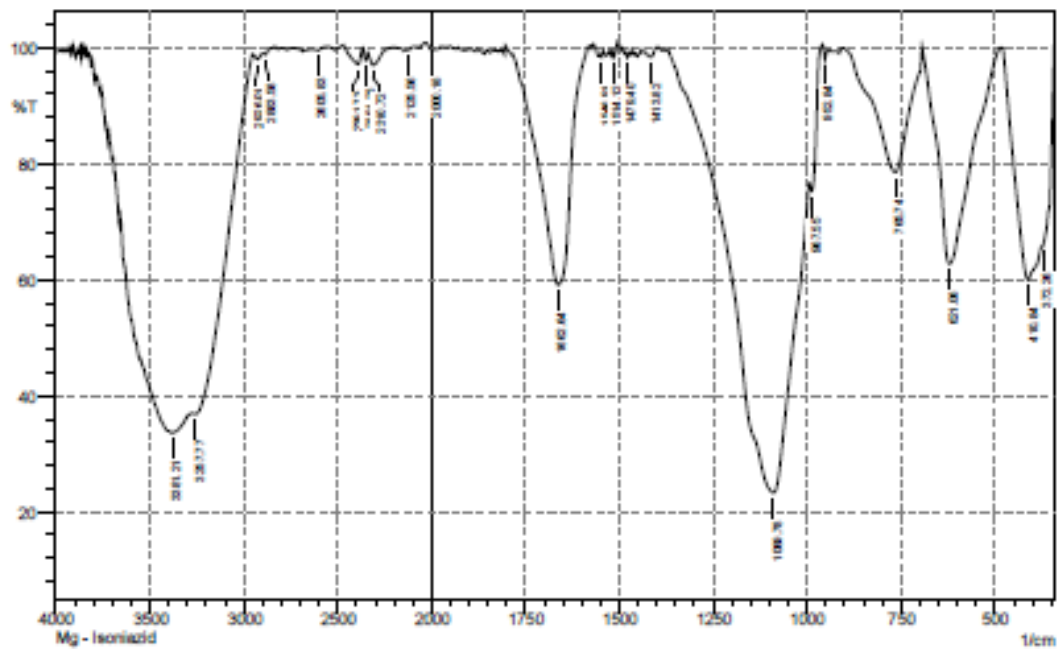
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No. of Scans;



Optimization Software:
www.balesio.com

Lampiran 13. Data FTIR Senyawa Kompleks Mg-isoniazid



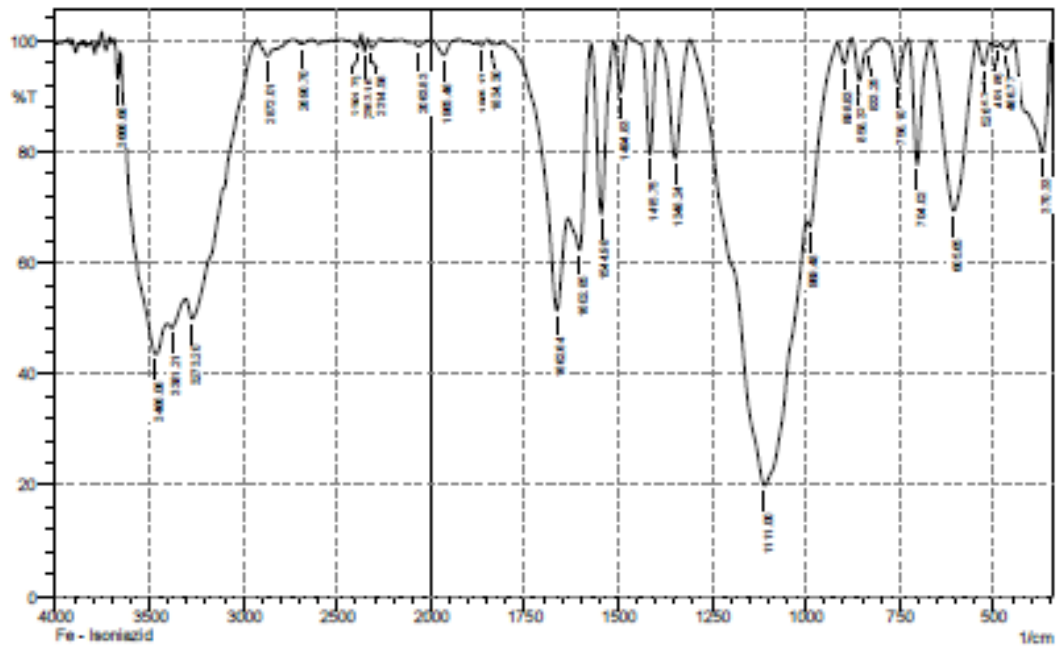
	Peak	Intensity	Corr. Intensity	Base (H)	Base (L)	Area	Corr. Area
1	372.26	65.551	2.047	374.19	343.33	3.850	1.084
2	410.84	59.99	18.329	482.2	378.05	15.015	5.287
3	621.08	62.713	38.861	692.44	484.13	18.43	18.133
4	785.74	78.494	21.472	904.61	694.37	10.273	10.227
5	952.84	97.937	2.219	958.62	943.19	0.058	0.06
6	987.55	75.314	5.334	993.94	960.55	2.014	0.415
7	1089.78	23.259	59.122	1371.39	995.27	98.763	76.618
8	1413.82	98.417	0.197	1415.75	1398.39	0.056	0
9	1479.4	98.269	0.863	1483.26	1473.62	0.053	0.016
10	1514.12	98.371	1.381	1517.68	1506.41	0.04	0.039
11	1548.91	98.311	0.804	1550.77	1543.05	0.042	0.012
12	1662.64	59.072	40.619	1784.15	1579.7	19.698	19.307
13	2000.18	99.556	0.907	2029.11	1989.32	0.002	0.119
14	2125.58	99.537	0.171	2135.2	2098.62	0.041	0.015
15	2310.72	98.941	2.343	2337.72	2254.79	0.753	0.521
16	2351.23	97.766	1.775	2366.66	2337.72	0.175	0.12
17	2391.73	97.595	2.99	2468.88	2366.66	0.704	0.769
18	2605.83	99.484	0.324	2628.98	2557.61	0.083	0.028
19	2883.58	98.765	0.604	2900.94	2860.43	0.141	0.042
20	2926.01	97.991	0.959	2954.95	2900.94	0.366	0.118
21	3257.77	36.61	3.168	3273.2	2954.95	72.586	5.362
22	3381.21	33.558	7.049	3550.95	3275.13	118.983	13.336

Comment;
Mg - Isoniazid

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No. of Scans;
Resolution;
Apodization;



Lampiran 14. Data FTIR Senyawa Kompleks Fe-isoniazid



	Peak	Intensity	Corr. Intensity	Base (H)	Base (L)	Area	Corr. Area
1	370.33	79.987	19.245	445.58	351.04	5.608	5.415
2	466.77	98.309	1.464	480.28	447.49	0.154	0.128
3	491.85	98.982	0.618	507.28	480.28	0.091	0.044
4	526.57	95.611	4.293	545.85	507.28	0.384	0.338
5	605.65	69.397	30.64	667.37	545.85	9.713	9.732
6	704.02	77.725	22.385	725.23	669.3	2.521	2.546
7	756.1	92.423	7.842	794.67	727.16	0.788	0.846
8	833.25	98.28	0.225	837.11	796.6	0.087	-0.035
9	858.32	92.867	6.508	877.61	839.03	0.639	0.523
10	898.83	95.828	4.124	916.19	877.61	0.324	0.323
11	989.48	96.51	4.014	997.2	916.19	5.998	0.337
12	1111	19.975	59.303	1307.74	999.13	98.728	72.236
13	1348.24	78.776	21.337	1392.61	1309.67	3.336	3.376
14	1415.75	79.609	20.25	1438.9	1394.53	1.911	1.884
15	1494.83	90.665	9.816	1510.28	1475.54	0.698	0.75
16	1544.98	68.658	30.832	1571.99	1512.19	4.183	4.111
17	1602.85	62.354	21.794	1633.71	1573.91	8.39	3.449
18	1662.64	51.465	21.591	1805.37	1635.64	16.921	4.581
19	1834.3	99.378	0.175	1849.73	1830.45	0.028	0.009
20	1865.17	99.103	0.738	1876.74	1849.73	0.054	0.04
21	1965.48	97.385	2.789	1996.32	1924.95	0.285	0.343
22	2063.83	98.957	0.877	2088.91	2027.19	0.196	0.124
23	2314.58	98.638	1.71	2337.72	2270.22	0.151	0.253
24	2353.18	98.075	2.651	2370.51	2337.72	0.089	0.195
25	2391.73	98.85	1.91	2430.31	2370.51	0.089	0.244
26	2690.7	99.421	0.739	2735.06	2632.83	0.077	0.147
27	2872.01	97.181	2.437	2924.09	2792.93	0.919	0.637
28	3273.2	49.96	7.759	3307.92	2926.01	57.99	7.313
29	3381.21	48.279	1.818	3402.43	3309.85	27.543	0.706
30	3466.08	43.58	17.63	3651.25	3404.36	61.624	21.872
31	3666.68	93.084	5.627	3689.83	3653.18	0.592	0.428

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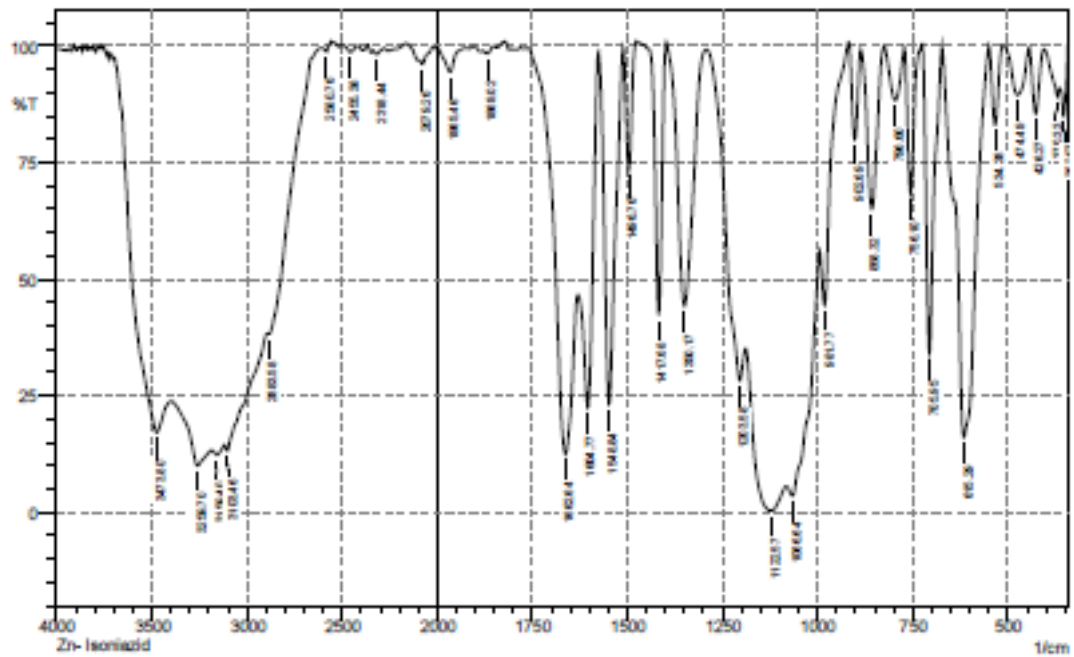
No. of Scans;

Resolution;

Apodization;



Lampiran 15. Data FTIR Senyawa Kompleks Zn-isoniazid



Peak	Intensity	Corr. Intensity	Base (H)	Base (L)	Area	Corr. Area
1	84.944	0.384	362.62	343.33	0.943	0.48
2	89.239	2.869	405.05	364.55	1.128	0.208
3	85.473	13.989	443.63	408.98	1.305	1.215
4	89.435	10.343	513.07	445.56	1.749	1.698
5	83.039	17.037	549.71	514.99	1.342	1.354
6	16.079	59.924	640.37	551.64	31.69	23.958
7	34.203	65.536	725.23	675.09	8.989	8.882
8	68.394	30.879	771.53	732.95	2.848	2.718
9	88.351	11.302	823.6	773.46	1.611	1.555
10	65.063	34.252	885.33	825.53	5.049	4.888
11	80.083	19.916	918.12	887.26	1.453	1.458
12	44.448	18.084	993.34	920.05	9.123	1.615
13	3.534	10.999	1082.07	995.27	74.844	10.624
14	0.368	16.114	1188.15	1083.99	155.185	65.332
15	28.315	15.424	1290.38	1190.08	25.616	4.637
16	44.308	55.553	1396.48	1292.31	14.139	14.043
17	42.235	57.903	1442.75	1398.39	6.185	6.198
18	73.353	26.627	1510.26	1477.47	2.023	2.049
19	23.236	75.895	1575.84	1512.19	15.568	15.354
20	22.454	49.043	1629.85	1577.77	18.983	19.489
21	12.49	46.681	1761.01	1631.78	49.271	20.327
22	98.347	1.042	1880.6	1853.59	0.134	0.071
23	94.395	5.064	1998.25	1928.82	0.781	0.619
24	98.094	1.574	2096.62	2021.4	0.724	0.218
25	98.204	0.988	2337.72	2279.88	0.399	0.122
26	98.631	1.344	2492.03	2418.74	0.292	0.194
27	98.787	1.493	2695.83	2557.61	0.99	0.141
28	38.256	1.727	2891.3	2695.83	45.802	0.613
29	13.202	2.766	3116.97	2893.22	138.562	1.371
30	12.302	1.454	3184.48	3118.9	57.961	1.78
31	10.021	6.913	3398.57	3186.4	171.888	13.038
32	17.123	24.541	3658.96	3400.5	131.01	42.009

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No. of Scans;

Resolution;



Lampiran 16. Data Hasil Uji Tuberkulosis



DMSO (Kontrol Negatif) 10 ppm 100 ppm 100 ppm

Hasil Uji Tuberkulosis Senyawa Kompleks Mg-isoniazid





10 ppm

100 ppm

1000 ppm

Hasil Uji Tuberkulosis Senyawa Kompleks Fe-isoniazid





10 ppm

100 ppm

1000 ppm

Hasil Uji Tuberkulosis Senyawa Kompleks Zn-isoniazid





10 ppm 100 ppm 1000 ppm

Data Hasil Uji Tuberkulosis Senyawa Isoniazid



Lampiran 17. Dokumentasi Proses Penelitian



(Zn-isoniazid)



(Fe-isoniazid)



(Mg-isoniazid)

Proses Sintesis Senyawa Kompleks





(Mg-isoniazid)



(Zn-isoniazid)



(Fe-isoniazid)

Proses Penyaringan

